



2019 NOVEL CORONAVIRUS (COVID-19) EPIDEMIOLOGICAL SURVEILLANCE PROTOCOL

Ministry of Health & Wellness, Jamaica

23 January 2020

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□ RKA BUILDING, 10-16 GRENADA WAY □ 45-47 BARBADOS AVENUE □ 24-26 GRENADA CRESCENT □ 10^A CHELSEA AVENUE
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2019 NOVEL CORONAVIRUS (COVID-19) EPIDEMIOLOGICAL SURVEILLANCE PROTOCOL

BACKGROUND

Coronaviruses (CoV) are a large family of viruses that cause illnesses ranging from less severe disease, such as the common cold, to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel coronavirus (nCoV) is a new strain that has not been previously identified in humans. Globally, novel coronaviruses emerge periodically in different areas, including SARS in 2002 and MERS in 2012¹.

A novel (new) coronavirus, 2019 Novel Coronavirus (COVID-19), was identified in Wuhan City, Hubei Province, China in December 2019. The virus has caused significant morbidity and mortality in China and has spread to other countries.

Jamaica reported its first case of COVID-19 on the 10th of March 2020. Transmission Patterns for Jamaica include:

Date of Transmission Pattern Jamaica	Category	Definition
Up to March 9, 2020	No cases	Countries/territories/areas with no cases
March 10, 2020	Sporadic cases	Countries/territories/areas with one or more cases, imported or locally detected
March 14, 2020	Clusters of cases	Countries/territories/areas experiencing cases, clustered in time, geographic location and/or by common exposures
Not Applicable	Community transmission	Countries/area/territories experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: <ul style="list-style-type: none">- Large numbers of cases not linkable to transmission chains- Large numbers of cases from sentinel lab surveillance- Multiple unrelated clusters in several areas of the country/territory/area

¹ World Health Organization, 2020. Retrieved on January 20, 2020 from <https://www.who.int/health-topics/coronavirus>



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Jamaica's epidemiological surveillance system will be used to detect and report on potential cases of COVID-19. The components of this surveillance system which will be used and enhanced as necessary are:

1. The Class 1 Notification System (Case-based surveillance)
2. Sentinel Surveillance
3. Hospital Active Surveillance

The protocol below shall be adhered to for surveillance activities. There are five components to be considered in surveillance for the COVID-19. These are:

- A. Case Identification
- B. Case Reporting and Investigation (including contact tracing)
- C. Monitoring Community Transmission
- D. Specimen Collection and Testing
- E. Data Analysis and Interpretation
- F. Data Dissemination and Outputs

PURPOSE OF THESE GUIDELINES

To provide guidance on how to implement surveillance standards for COVID-19.

OBJECTIVES

The objectives of epidemiological surveillance of COVID-19 are:

1. To monitor trends of COVID- 19 in Jamaica
2. To establish epidemiological characteristics of COVID-19 infection in Jamaica
3. To inform risk assessment and decision-making.

Version 16 of the 2019 Novel Coronavirus (Covid-19) Surveillance Protocol includes the following updates:

- Updated case definitions
- Definition of transmission pattern
- Update on surveillance requirements
- Monitoring Community Transmission

A. CASE IDENTIFICATION

COVID-19 by **Public Health Order** was made a **Class 1 Notifiable Disease** in March 2020.

Case-based Surveillance

Suspected Case²

- ✓ A person with acute respiratory illness (fever and at least ONE (1) sign or symptom of respiratory disease (e.g., Cough, Shortness of Breath)) AND a history of travel to or residence in a location reporting community transmission (see current WHO COVID-19 Situation Report) of COVID-19 disease during the 14 days prior to symptom onset.

OR

- ✓ A person with fever or any acute respiratory illness AND having been in contact (*this includes Bedroom, Household, Health-Care Workers, Conveyance and Casual Contacts*) with a confirmed or probable case of COVID-19 case, in the 14 days prior to the onset of illness.

OR

- ✓ A person with severe acute respiratory infection (fever and at least ONE (1) sign or symptom of respiratory disease (e.g., Cough, Shortness of Breath)) AND requiring hospitalization AND in the absence of an alternative diagnosis that fully explains the clinical presentation.

SUSPECTED CASE

Fever + Respiratory Symptoms
AND
Travel History

OR

Fever **OR** Respiratory Symptoms
AND
Contact with a Confirmed or Probable
Case

OR

Fever + Respiratory Symptoms
AND
Hospitalization Needed
AND
No Alternative Diagnosis

**ACTION: NOTIFY PARISH HEALTH DEPARTMENT, ISOLATE, TAKE A SAMPLE
AND COMPLETE CASE INVESTIGATION**

² World Health Organization, 2020 March 20. Global surveillance for COVID-19 caused by human infection with COVID-19 virus. Retrieved on March 24, 2020 from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/surveillance-and-case-definitions>

Probable Case²

- ✓ A suspected case for whom testing for COVID-19 virus is inconclusive.

OR

- ✓ A suspected case for whom testing for COVID-19 could not be performed for any reason.

ACTION: MAINTAIN ISOLATION

Confirmed Case²

- ✓ A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

ACTION: MAINTAIN ISOLATION



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B. CASE REPORTING AND INVESTIGATION

Notification

COVID-19 is a Class 1 notifiable condition. This means all cases thought to be COVID-19 must be notified by the medical practitioner (public and private) within 24 hours of suspicion. Specifically, for COVID-19, the local Parish Health Department and National Surveillance Unit must be notified immediately. A Class 1 Notification Form must be submitted within 24 hours of initial notification.

The Parish Medical Officer (Health) or designate, upon receiving said notification must immediately activate the call-out cascade for health emergencies. The Ministry of Health and Wellness National Emergency Operations Centre (MOHW NEOC) should be alerted immediately, via the National Epidemiological Surveillance System to all notifications for COVID-19.

Clusters of visits for respiratory infections or undifferentiated fever must be notified by the medical practitioner (public and private) within 24 hours of suspicion. The local Parish Health Department or National Surveillance Unit must be notified immediately. A Class 1 Notification Form must be submitted within 24 hours of initial notification. Clusters should be investigated with cases being line listed.

Investigation

The Parish Medical Officer (Health) leads the case investigation team and must:

- Initiate case investigation within 24 hours of notification. A preliminary case or cluster investigation report must be submitted within 24 hours of this notification (Appendix 2).
- Immediately initiate community outbreak control measures, including contact tracing (Appendix 7), searching for other cases and line listing of all contacts using the Excel spreadsheet provided separately. Appendix 3 gives the fields required for said line-listing.

Contact Tracing³

All contacts must be listed with the minimum dataset stated in Appendix 3. Risk assessment must be completed for all contacts.

Contacts should be classified as bedroom, household, health-care worker, conveyance or casual using the information in Appendix 7. The completed contact listing should be discussed with the MOHNEOC for a decision to be made regarding the type of quarantine.

- All close contacts (bedroom, household) will be placed in quarantine and observed daily for the development of symptoms. The period of quarantine and observation will end when a negative result for COVID-19 is received for a suspected case.
- All contacts of Probable and Confirmed COVID-19 cases will be placed in quarantine and observed daily for the development of symptoms for a period of 14 days after most recent contact.
- All contacts will be given explicit instructions (verbal and written) regarding the steps to be taken if symptoms develop.
- A record of the daily observation checks for contacts should be maintained at the Parish Health Department and daily reports submitted to the MOHW NEOC (Appendix 6).

³ A contact is a person who is involved in any of the following within 14 days after the onset of symptoms in the patient:

- providing direct care for patients with COVID-19 disease without using proper personal protective equipment;
- staying in the same close environment as a COVID-19 patient (including sharing a workplace, classroom or household or being at the same gathering);
- travelling in close proximity with (that is, having less than 1 m separation from) a COVID-19 patient in any kind of conveyance.

Definition taken from Global Surveillance for COVID-19 disease caused by human infection with the 2019 novel coronavirus retrieved on 10 March 2020 from [https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-\(2019-ncov\)](https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov))



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C. MONITORING COUNTRY TRANSMISSION

Sentinel Surveillance

Severe Acute Respiratory Illness (SARI) Surveillance

- ✓ A person who presents with symptoms of a measured fever or history of fever and a cough with onset within the last 10 days or less AND who requires hospitalization for their illness.

ACTION: NOTIFY THE PARISH HEALTH DEPARTMENT AND TAKE A SAMPLE

ALL HOSPITALS TO REPORT SARI CASES

For Non SARI Sentinel Site – Please complete Laboratory Form in duplicate and submit a copy to the Parish Health Department/National Surveillance Unit (NSU). Ensure the information is as complete as possible. Testing of samples **WILL NOT be done for samples without a Laboratory Form submitted to the NSU.*

**For SARI Sentinel Site – Please continue to report as per Ministry of Health and Wellness, Updated National Surveillance Manual, Section 13, June, 2019.*

Influenza-Like Illness (ILI) Sentinel Surveillance

- ✓ A person who presents with symptoms of a measured fever or history of fever and a cough with onset within the last 10 days or less.

ACTION: NOTIFY THE PARISH HEALTH DEPARTMENT OF TOTAL CASES SEEN WEEKLY AND TAKE SAMPLES OF CASES BASED ON QUOTAS

78 SENTINEL SURVEILLANCE SITES TO REPORT

*Please complete Laboratory Form in duplicate and submit a copy to the Parish Health Department/NSU. Ensure the information is as complete as possible. Testing of samples **WILL NOT** be done for samples without a Laboratory Form submitted to the NSU.*



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Hospital Active Surveillance

Admitted Lower Respiratory Tract Infection (LRTI) / Pneumonia Surveillance

- ✓ A Person who presents with a lower respiratory tract infection with onset within the last 14 days or less AND who requires hospitalization for their illness.

ACTION: NOTIFY THE PARISH HEALTH DEPARTMENT AND TAKE A SAMPLE

ALL HOSPITALS TO REPORT ADMITTED LRTI / PNEUMONIA

*Please complete Laboratory Form in duplicate and submit a copy to the Parish Health Department/ NSU. Ensure the information is as complete as possible. Testing of samples **WILL NOT** be done for samples without a Laboratory Form submitted to the NSU.*

Health-Care Worker Surveillance

Health-Care Worker Surveillance

- ✓ A Health-Care Worker who presents with a measured fever and a cough/shortness of breath with onset within the last 10 days or less.

This surveillance process is specific to HCWs who are caring for patients and have no known history of contact with a confirmed or probable COVID-19 case.

ACTION: NOTIFY (SELF OR FACILITY REPORT) THE PARISH HEALTH DEPARTMENT AND TAKE A SAMPLE

SELF OR FACILITY REPORTING

*Please complete Laboratory Form in duplicate and submit a copy to the Parish Health Department/NSU. Ensure the information is as complete as possible. Testing of samples **WILL NOT** be done for samples without a Laboratory Form submitted to the NSU.*

For All CONFIRMED COVID-19 CASES

Case Investigation & Contact Tracing is to be done.

A COVID-19 Case Investigation Form must be completed and submitted to the Parish Health Department/National Surveillance Unit.

D. SPECIMEN COLLECTION AND TESTING

WHO⁴ Laboratory Strategy Guideline based on Transmission Scenario

Transmission Scenario:

- Most cases of local transmission linked to chains of transmission

Public Health Aim:

- Stop transmission and prevent spread

Testing Strategy Guidance:

- Test all individuals meeting the suspected case definition
- Consideration in the investigation of cases and clusters of COVID-19
- Clinical management of severe acute respiratory infections when novel coronavirus is suspected
- SARI/ILI surveillance for COVID-19 and reporting

Specimens must be collected from the following persons:

- i. All Suspected Cases (as per the case definition above)
- ii. All symptomatic contacts of confirmed COVID-19 cases
- iii. All persons isolated in regard to COVID-19 infection
- iv. All SARI cases from ALL Hospitals
- v. All Admitted LRTI / Pneumonia from ALL Hospitals
- vi. ILI Sentinel Sites based on estimated weekly quotas (Appendix 8)
- vii. All health workers who present with a measured fever and cough of 10 days' duration or less

Samples will be tested for COVID-19 testing for the following persons:

1. All Suspected Cases (as per the case definition above)
2. All symptomatic contacts of confirmed COVID-19 cases
3. All persons isolated in regard to COVID-19 infection
4. All SARI cases from ALL Hospitals
5. All Admitted LRTI / Pneumonia from ALL Hospitals

⁴ World Health Organization, 2020 March 22. Laboratory testing strategy recommendations for COVID-19 Retrieved on March 24, 2020 from https://apps.who.int/iris/bitstream/handle/10665/331509/WHO-COVID-19-lab_testing-2020.1-eng.pdf



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6. Samples submitted from ILI Sentinel Sites based on estimated weekly quotas
7. All health workers who present with a measured fever and cough of 10 days' duration or less

Type of specimen

The recommended sample is a lower respiratory tract specimen (e.g., endotracheal aspirate, sputum or bronchoalveolar lavage). These specimens must be placed in a sterile container.

In cases where lower respiratory tract specimens could not be obtained, a nasopharyngeal aspirate (in a sterile container) OR combined nasopharyngeal and oropharyngeal swabs should be taken for testing (Appendix 4). Swabs should be collected with Dacron or polyester flocked swabs and placed in viral transport medium. **Avoid using cotton tipped swabs for specimen collection.**

Labelling of specimens

All specimens must be labeled with:

1. Patient Name
2. Referring Facility
3. Date of Birth
4. Diagnosis: Suspected COVID-19
5. Date and time of sample collection

Specimens must be placed on ice at 4-8°C and transported **immediately** to the National Public Health Laboratory.

All specimens must be accompanied by a completed Jamaica Laboratory Investigation Form (see attached 5). Contact the Consultant Microbiologist (Tel. No. 876-317-8376) immediately to inform them of the sample.

Samples are NOT to be sent to private laboratories or directly to the University Hospital of the West Indies Laboratory.



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E. DATA ANALYSIS AND INTERPRETATION

Review and analysis of surveillance data must be completed at all levels.

The Parish Medical Officer (Health) must ensure that Class 1 Notification Forms and Case Investigation Forms are forwarded simultaneously to the Regional Health Authorities and the National Surveillance Unit, within the timelines specified above. A line listing of all reported cases should be maintained at the parish health department along with contact listings for each case. Epidemic curves as well as age, sex and geographic distribution of cases must be maintained at the parish level.

The Regional Technical Director, in collaboration with the Regional Medical Epidemiologist, must ensure that the line and contact listings are maintained for each parish. The age, sex, and geographic distribution, as well as the severity of cases should be monitored. Depending on the situation, daily or weekly reports may be required.

The National Surveillance Unit will conduct analysis of national data, including the epidemiological profile of cases and the epidemic curves as the situation evolves. The National Surveillance Unit will prepare appropriate reports showing information on the patterns of disease within the population.

F. DATA DISSEMINATION AND OUTPUTS

The National Surveillance Unit will be responsible for forwarding the information obtained from national level analysis to the Ministry of Health and Wellness National Emergency Operations Centre (MOHW NEOC).

The National Surveillance Unit will inform the MOHW NEOC of any notified, suspected, probable and confirmed cases of novel coronavirus infection immediately upon identification of a suspected, probable, or confirmed case, by providing a minimum data set below.

Minimum Dataset for each case

- | | |
|---|---|
| 1. ID# | 6. Country of travel |
| 2. Initials | 7. Contact vs primary case |
| 3. Parish | 8. Isolated (Y/N) |
| 4. Classification (Suspected/Confirmed) | 9. Number of secondary cases identified |
| 5. Recent Travel History (Y/N) | |



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APPENDIX 1: CLASS 1 NOTIFICATION FORM

CLASS 1 REPORTING FORM - INDIVIDUAL NOTIFICATION (ON SUSPICION)

Date of Report: ____/____/____ (DD/MM/YY)		NEW CASE / PREVIOUSLY REPORTED CASE (Circle One)	
Diagnosis: _____			
Case Demographic Information			
Name (including pet name): _____		Sex: _____	Age: _____ D.O.B. ____/____/____ (dd/mm/yy)
Address: (Include Landmark)		Lot #: _____ Street _____ (Name)	Street Type: _____ (Drive, Road, Close etc)
Community _____		Neighbouring Community/District: _____ Parish: _____	
Workplace/School: _____		Occupation: _____	
(H) Phone #: _____ (Wk) Phone #: _____		History of overseas travel in past 4-6 weeks? Y / N	
		Specify area/country: _____	
Name of NOK/Parent: _____		Relationship to case: _____	
Address of NOK/Parent: _____		Phone No.: _____	
Clinical Information:			
Symptoms: _____		Hosp./Facility Name: _____	
Date of onset: ____/____/____ (dd/mm/yy)		Medical Record #: _____	
Specimen Taken Y / N Type: _____		Case admitted to Hosp?: Y / N (Circle one)	
Specimen Date: ____/____/____ (dd/mm/yy) Laboratory: _____		Date of Admission: ____/____/____ (dd/mm/yy)	
Result (s): _____		Ward: _____	
		If dead, Date of Death: ____/____/____ (dd/mm/yy)	
Notifier Information			
Name of notifier: _____ Phone #: _____		Received by MO(H) ____/____/____ (dd/mm/yy)	
Address: _____ Email: _____		Parish MO(H) Signature _____	
Comments: _____		Forwarded to R.S.O. ____/____/____ (dd/mm/yy)	
		Forwarded to Surveillance Unit ____/____/____ (dd/mm/yy)	

Ministry of Health, Surveillance Unit, July 2018

APPENDIX 2: CASE INVESTIGATION FORM

2019 Novel Coronavirus (COVID-19) Case Investigation Form

Date of Reporting: _____	Region: _____	Parish: _____
Doctor: _____	Hospital / Site: _____	Ward: _____
Email: _____	Phone #: _____	

Hospital/Medical Record Number: _____ NEW CASE ☐ UPDATE ☐

Last Name: _____ First Name: _____

Date of Birth: _____ Age: _____ Sex: MALE ☐ FEMALE ☐

Country of Residence: _____ Parish: _____ Community: _____

Street #: _____ Street Name: _____

☐ Epidemiologic Week of Onset: _____ Date of Onset of Illness: _____ Admission Date: _____

CLINICAL & EPIDEMIOLOGICAL PROFILE									
CLINICAL PROFILE									
History of Fever or Fever over 38°C (<10 days)				Yes	No	Recorded temperature _____ °C			
Cough	Yes	No	Difficulty Breathing/Wheezing	Yes	No	Dyspnea/Tachypnea	Yes	No	
Rhinorrhoea	Yes	No	Nausea/Vomiting	Yes	No	Abnormal Lung Auscultations	Yes	No	
Sore Throat	Yes	No	Headache	Yes	No	Abnormal lung x-ray findings	Yes	No	
Shortness of Breath	Yes	No	Myalgia	Yes	No	Seizure	Yes	No	
Other, please specify: _____				Other, please specify: _____					
RISK FACTORS									
Pregnancy	Yes	No	Lung Disease including COPD	Yes	No	Immunocompromised due to disease or treatment	Yes	No	
If yes, Trimester	1	2	3	Asthma	Yes	No	HIV / AIDS	Yes	No
Diabetes Mellitus	Yes	No	Neurological Diseases	Yes	No	Malignancy	Yes	No	
Sickle Cell Disease	Yes	No	Liver Diseases	Yes	No	Other, please specify: _____			
Heart Diseases	Yes	No	Renal Diseases	Yes	No				
EPIDEMIOLOGICAL PROFILE									
Occupation Health Care Worker <input type="checkbox"/> Health Laboratory Worker <input type="checkbox"/> Working with Animals <input type="checkbox"/> Student <input type="checkbox"/> Other, please specify: _____									
Close Contact with a person with acute respiratory infection in the 14 days prior to onset of symptoms				Yes	No	Animal Contact			
If yes, where: Home <input type="checkbox"/> Work <input type="checkbox"/> Health Care Setting <input type="checkbox"/> Other, please specify: _____						If yes, please specify: _____			
Close Contact with Probable or Confirmed Case in the 14 days prior to onset of symptoms				Yes	No	Travel abroad in the 14 days prior to onset of symptoms			
If yes, where: Home <input type="checkbox"/> Work <input type="checkbox"/> Health Care Setting <input type="checkbox"/> Other, please specify: _____						Contact with traveler in past 14 days?			
						If yes, country(ies) visited: _____			
Visited any Health Facility in the 14 days prior to onset of symptoms				Yes	No	Date of departure: _____			
If yes, Health Facility visited: _____						Other: _____			

Fever (> 38 °C) may not be present in some patients, such as those who are very young, elderly, immunocompromised, or taking certain medications. Clinical judgement should be used to guide testing of patients in such situations ☐

A contact is a person - Providing direct care for Confirmed (Test Positive) Cases; working with health care workers infected with novel coronavirus; visiting patients or staying in the same close environment of a Positive patient; Working together in close proximity or sharing the same classroom environment with a Test Positive patient - Traveling together with a Test Positive patient in any kind of conveyance; Living in the same household as a Test Positive patient within a 14-day period after the onset of symptoms is the case under consideration.

TRAVEL HISTORY/ In the 14 days before symptom onset, did the patient:

Spend time in China?	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown
If Yes,	
Province.....City.....	Departure Date
Province.....City.....	Departure Date
Province.....City.....	Departure Date
Province.....City.....	Departure Date
Travel to another country (Not China)	
If Yes,	
Province/State.....City.....	Departure Date
Province/State.....City.....	Departure Date
Province/State.....City.....	Departure Date
Have close contact ² with a person who is under investigation for 2019-nCoV?	
<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown	
Have close contact ² with a person with laboratory confirmed 2019-nCoV?	
<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown	
Have close contact ² with a laboratory-confirmed 2019-nCoV case?	
<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown	
Was the case ill at the time of contact?	
<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown	
Is the case a Jamaican case?	
<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown	
Is the case an international case?	
<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unknown	
In which country was the case diagnosed with 2019 n-CoV?	

Sample taken: Yes ☐ No ☐ Sample Type: _____ Date Sample Taken: _____
 Sample taken to Lab: Yes ☐ No ☐ Date Sample Taken to Lab: _____
 Laboratory Results: Virology Positive ☐ Negative ☐ Virus: _____
 Bacteriology Positive ☐ Negative ☐ Bacteria: _____
 Treatment Received: _____ Patient ventilated ☐
 Isolated ☐ Date: _____ Admission to ICU ☐ Date: _____
 Discharged from Hospital ☐ Date: _____ Death ☐ Date: _____
 Final Diagnosis: _____ MO(H) Signature: _____

Fever (> 38 °C) may not be present in some patients, such as those who are very young, elderly, immunosuppressed, or taking certain medications. Clinical judgement should be used to guide testing of patients in such situations.

A contact is a person: - Providing direct care for Confirmed (Test Positive) Cases; working with health care workers infected with novel coronavirus; visiting patients or staying in the same close environment of a Positive patient; Working together in close proximity or sharing the same classroom environment with a Test Positive patient - Traveling together with a Test Positive patient in any kind of conveyance; Living in the same household as a Test Positive patient within a 14-day period after the onset of symptoms in the case under consideration.



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APPENDIX 3: CONTACT LISTING

List of Fields for Contact Line Listing

- A. Date of intake
- B. Name of Suspected/Confirmed Case
- C. Type of Contact
- D. Risk level
- E. Date of most recent contact
- F. First name
- G. Last name
- H. Date of Birth
- I. Current Age
- J. Sex at Birth
- K. Current Age
- L. Telephone number 1
- M. Next of Kin name
- N. Next of Kin telephone number
- O. Street Number
- P. Street Name
- Q. District
- R. Community
- S. Parish
- T. Landmark
- U. Symptomatic
- V. Date of onset of symptoms
- W. Comments

APPENDIX 4: TAKING A NASOPHARYNGEAL SAMPLE

TAKING A NASOPHARYNGEAL SWAB

Ensure adherence to airborne precautions

- Assemble equipment and forms

RESOURCES NEEDED

Viral or Universal Transport Medium

Synthetic swabs

Lab Investigation Form

Gown, N95 respirator, Eye Protection, Gloves

- Notify the Director, National Laboratory Service or Microbiologist at the National Public Health Laboratory
- Explain the procedure to the Patient
- Gain the patient's permission to perform the procedure
- Complete the Jamaica Laboratory Investigation Form
- Label Universal Transport Medium or Viral Transport Medium (VTM) tube
- Wash hands; put on gown, N95 respirator, eye protection, and gloves
- Have the patient evacuate mucous (if present) from both nostrils
- Tilt patient's head back 70 degrees
- Insert swab into nostril (to a depth equal to distance from nostrils to outer opening of the ears)
- Leave swab in place for several seconds to absorb secretions
- Slowly remove swab while rotating it – swab both nostrils with the same swab
- Place tip of swab into the sterile UTM/VTM tube below the level of the liquid media.
- Break/Cut off the applicator stick at the scored point or to a length that allows it to fit the tube
- Seal the cap tightly on the UTM/VTM tube
- Place UTM/VTM tube on frozen cold pack
- Wash hands



APPENDIX 5: JAMAICA: LABORATORY SURVEILLANCE INVESTIGATION FORM

JAMAICA: Laboratory Surveillance Investigation Form		APPENDIX 14 – September 2017	
1. Patient Information			
Last Name _____			
First Name _____			
Patient ID _____			
Gender <input type="checkbox"/> M <input type="checkbox"/> F Age _____ years <input type="checkbox"/> months			
Date of Birth _____			
Street #/ - _____			
City/Parish _____			
Postal Code _____ Tel: _____			
Travel History <input type="checkbox"/> Y <input type="checkbox"/> N Country Visited: _____			
2. Referring Doctor			
Consultant: _____			
Attending Dr.: _____			
Signature: _____			
Reporting Address: _____ HOSPITAL / WARD			
Tel: _____ Fax: _____			
Date Specimen Taken: _____			
3. Provisional Diagnosis (eg. Malaria, Influenza, Measles)			
4. Food/Animal/Environment Sample Details (if relevant)			
Specimen ID _____			
Name of food/env sample _____			
Where specimen(s) collected _____			
<input type="checkbox"/> Outbreak <input type="checkbox"/> Traceback <input type="checkbox"/> Survey <input type="checkbox"/> Other			
5. Case/Specimen Status			
<input type="checkbox"/> Single case <input type="checkbox"/> Outbreak <input type="checkbox"/> Survey <input type="checkbox"/> Unknown			
6. Date of Onset of Illness _____/_____/_____			
7. Outcome			
Hospitalized? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> DK			
Died? <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> DK			
8. Signs and Symptoms			
<input type="checkbox"/> Fever → Temp: _____ → Onset: _____			
<input type="checkbox"/> Rash → Location: _____ → Onset: _____			
<input type="checkbox"/> Pain → Location _____			
<input type="checkbox"/> Haemorrhagic symptoms → describe _____			
<input type="checkbox"/> Paralysis → Location: _____ → Onset: _____			
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Altered mental state <input type="checkbox"/> Chills <input type="checkbox"/> Circulatory collapse <input type="checkbox"/> Conjunctivitis <input type="checkbox"/> Convulsions <input type="checkbox"/> Coryza <input type="checkbox"/> Cough <input type="checkbox"/> Diarrhoea <input type="checkbox"/> Failure to thrive </div> <div> <input type="checkbox"/> Hepatomegaly <input type="checkbox"/> Jaundice <input type="checkbox"/> Neck stiffness <input type="checkbox"/> Lymphadenopathy <input type="checkbox"/> Kernig's sign <input type="checkbox"/> Vomiting <input type="checkbox"/> Weakness of limbs <input type="checkbox"/> Weight loss <input type="checkbox"/> Other → specify _____ </div> <div> Chronic Conditions <input type="checkbox"/> Asthma <input type="checkbox"/> Autoimmune disease <input type="checkbox"/> Cancer <input type="checkbox"/> Diabetes Mellitus <input type="checkbox"/> HIV / AIDS </div> </div>			
9. Syndromic Classification			
<input type="checkbox"/> Acute Flaccid Paralysis <input type="checkbox"/> Fever & Rash			
<input type="checkbox"/> Gastroenteritis <input type="checkbox"/> Fever & Respiratory			
<input type="checkbox"/> Fever & Hemorrhagic <input type="checkbox"/> Fever & Neurologic			
<input type="checkbox"/> Fever (undifferentiated)			
10. Immunization History EPI No: _____			
BCG: <input type="checkbox"/> Y <input type="checkbox"/> N _____ MR: <input type="checkbox"/> Y <input type="checkbox"/> N _____			
DPT: <input type="checkbox"/> Y <input type="checkbox"/> N _____ Polio: <input type="checkbox"/> Y <input type="checkbox"/> N _____			
HBV: <input type="checkbox"/> Y <input type="checkbox"/> N _____ YF: <input type="checkbox"/> Y <input type="checkbox"/> N _____			
MMR: <input type="checkbox"/> Y <input type="checkbox"/> N _____ Other: <input type="checkbox"/> Y <input type="checkbox"/> N _____			
¹ Specify _____			
Physician / EHO Use	*Serum; EDTA blood; Blood smear; Sputum; CSF; Swab; Urine; Stool; Tissue; Plasma (PPT); Food/Water/Animal/Environment; if other specify _____		
	Specimen 1		
	Specimen 2		
	Specimen 3		
Laboratory Use	*Type of Specimen		
	Date Specimen Collected		
	Lab Test(s) Requested		
	Date Received at Nat Lab		
	Nat Lab Specimen ID		
	Test(s) Performed		
	Date(s) Tested		
Laboratory diagnosis			
Date Referred to CAREC			
Name of Testing Lab			
Approved by (Testing Lab): _____ Date: _____			
CARPHA USE: Specimen ID (1) _____ (2) _____ (3) _____			
FXT/050/462 National Laboratory Services Quality Assurance			



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APPENDIX 6: PARISH DAILY CONTACT TRACING REPORTING FORM

Parish: _____

Date of Report: _____

CONTACT TRACING SUMMARY REPORT

CONFIRMED CASE'S INITIALS	No. of Households visited (cum)	No. of Persons interviewed (cum)	No. of contacts identified (cum)	No. of contacts named (cum)	No. of contacts symptomatic (cum)	No. of contacts currently isolated	No. of contacts currently being followed

Report Prepared by: _____

Position of Reporter: _____

Parish MO(H) signature: _____

APPENDIX 7: CONTACT INVESTIGATION PROTOCOL

Investigations must be initiated within 24 hours of the parish team becoming aware of a case.

Objectives of case investigation

1. Rapidly detect COVID-19 cases
2. Reduce human to human spread of COVID-19

Investigation Team

1. Team Leader – Parish Medical Officer (Health) or designate
2. Interviewers – Personnel with the capacity and authority to interview, triage, and take samples from contacts. Interviewers must be trained and skilled in IPC measures specific to COVID-19
3. Clerical Officer – Epidemiology Clerk or other clerk who will collate and organize data collected, and assist with the preparation of reports.

Required Tools/Resources

- Sufficient quantity of appropriate PPE
- Specimen collection materials – UTM/Swabs, labels, biohazard bags, coolers
- Case Investigation Protocols, Sampling SOPs, Class 1 and Contact Line Listing forms

Contacts Defined

Contacts are classified as **High Risk, Moderate Risk, or Low Risk** based on the degree, duration, and timing of exposure (in relation to symptoms). Bedroom, household and health-worker contacts are defined as high risk; conveyance contacts are classified as moderate risk, and casual contacts are classified as low risk.

Definitions of contact types:

1. **Bedroom** – A person who shared a bed or slept in the same room for one or more nights
2. **Household** – A person who shared the same enclosed living space for one or more nights or for extended periods during the day
3. **Health-care worker** – A person who provided direct care for a suspected or confirmed COVID-19 case without using proper personal protective equipment
4. **Conveyance** – travelling in close proximity with (that is, having less than 1 m separation from) a COVID-19 patient in any kind of conveyance
5. **Casual** – A person who was in a social situation with no physical contact or close proximity to a suspected or confirmed case

Contact Tracing⁵

All contacts must be listed with the minimum dataset stated in Appendix 3 Risk assessment must be completed for all contacts.

Contacts should be classified as bedroom, household, health-care worker, conveyance or casual using the information in *Contacts Defined* above. The completed contact listing should be discussed with the MOHNEOC for a decision to be made regarding the type of quarantine. All contacts will be quarantined (Figure 1).

Management of contacts

Asymptomatic Contacts

- All contacts will be quarantined and observed daily for the development of symptoms. The period of quarantine and observation will end when a negative result for COVID-19 is received for a suspected case.
- All contacts of Probable and Confirmed COVID-19 cases will be quarantined and observed daily for the development of symptoms for a period of 14 days after most recent contact.
- All contacts will be given explicit instructions (verbal and written) regarding the steps to be taken if symptoms develop.
- A record of the daily observation checks for contacts should be maintained at the Parish Health Department and daily reports submitted to the MOHW NEOC.

Symptomatic Contacts

- Triage and isolate all symptomatic contacts
- Notify the MOHNEOC and the National Surveillance Unit once a contact becomes symptomatic

⁵ A contact is a person who is involved in any of the following within 14 days after the onset of symptoms in the patient:

- providing direct care for patients with COVID-19 disease without using proper personal protective equipment;
- staying in the same close environment as a COVID-19 patient (including sharing a workplace, classroom or household or being at the same gathering);
- travelling in close proximity with (that is, having less than 1 m separation from) a COVID-19 patient in any kind of conveyance.

Definition taken from Global Surveillance for COVID-19 disease caused by human infection with the 2019 novel coronavirus retrieved on 10 March 2020 from [https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-\(2019-ncov\)](https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov))

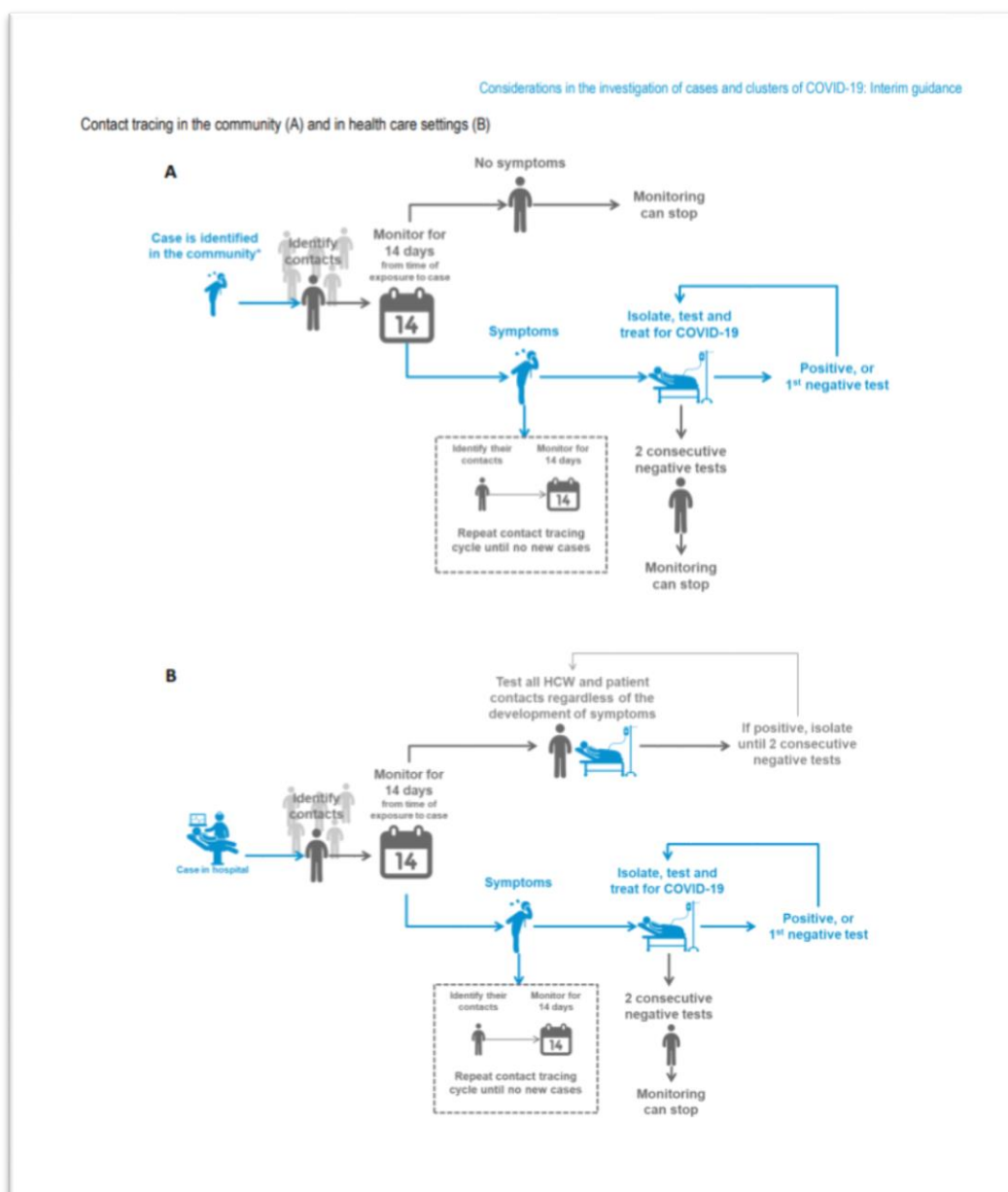


Figure 1. ⁶ Pictogram showing the contact tracing protocols for COVID-19 cases detected in community and hospital settings.

⁶ World Health Organization. 2020. Considerations in the investigation of cases and clusters of COVID-19: Interim Guidance, 13 March 2020. Retrieved on March 16, 2020 from <https://www.who.int/internal-publications-detail/considerations-in-the-investigation-of-cases-and-clusters-of-covid-1>

APPENDIX 8: ILI SENTINEL SURVEILLANCE WEEKLY SAMPLING QUOTA

Region	Sites	Average ILI /week 2019	Quota	Estimated Weekly Quota
Western Regional Health Authority				
1	Lucea Health Centre	5	All ILI Cases	5
2	Noel Holmes Hospital	15	All ILI Cases	10
3	Cambridge Health Centre	9	All ILI Cases	9
4	Catherine Hall Health Centre	21	10	10
5	Cornwall Regional Hospital	34	14	14
6	Mobay hope Hospital / Hospiten	5	All ILI Cases	5
7	Mobay Type V Health Centre	126	50	14
8	Mount Salem Health Centre	8	All ILI Cases	8
9	Albert Town Health Centre	5	All ILI Cases	5
10	Dewar Duncans Health Centre	7	All ILI Cases	7
11	Falmouth Health Centre	2	All ILI Cases	2
12	Falmouth Hospital	66	14	14
13	Ulster Spring Hospital	11	10	10
14	Darliston Health Centre	4	All ILI Cases	4
15	Negril Health Centre	4	All ILI Cases	4
16	Savanna-La-Mar Health Centre	19	All ILI Cases	10
17	Savanna-La-Mar Hospital	43	14	14
18	White House Health Centre	8	All ILI Cases	8
19	Dr's Surgi Clinic	0	All ILI Cases	-
20	Green Island Health Centre	0	All ILI Cases	-
21	Hopewell Health Centre	1	All ILI Cases	-
22	Maroon Town Health Centre	1	All ILI Cases	-
23	Sandy Bay Health Centre	1	All ILI Cases	-
Southern Regional Health Authority				
1	Chapelton Hospital	2	All ILI Cases	2
2	Lionel Town Hospital	19	All ILI Cases	10
3	May Pen Health Centre	2	All ILI Cases	2
4	May Pen Hospital	12	All ILI Cases	10
5	Mandeville Health Centre	59	14	14
6	Mandeville Hospital	74	14	14
7	Newport Health Centre	3	All ILI Cases	3
8	Percy Junor Hospital	13	All ILI Cases	10
9	Porus Health Centre	18	10	10
10	Black River Health Centre	4	All ILI Cases	4
11	Black River Hospital	25	10	10
12	Santa Cruz Health Centre	6	All ILI Cases	6
13	Southfield Health Centre	3	All ILI Cases	3

Region	Sites	Average ILI /week 2019	Quota	Estimated Weekly Quota
14	Cross Keys Health Centre	1	All ILI Cases	-
15	Hargreaves Memorial Hospital	1	All ILI Cases	-
16	Maggotty Health Centre	1	All ILI Cases	-
17	Spaulding Health Centre	1	All ILI Cases	-
Southeast Regional Health Authority				
1	Bustamante Hospital for Children	138	30	30
2	Duhaney Park Health Centre	14	10	10
3	Glen Vincent H/C	45	10	10
4	Edna Manley H/C	6	All ILI Cases	6
5	Harbour View H/C	6	All ILI Cases	6
6	Maxfield Park H/C	3	All ILI Cases	3
7	Stoney Hill H/C	5	All ILI Cases	5
8	University Hospital	24	10	10
9	UWI Health Centre	3	All ILI Cases	3
10	Greater Portmore H/C	21	10	10
11	Linstead H/C	13	10	10
12	Spanish Town Hospital	18	All ILI Cases	10
13	Saint Jago Park H/C	4	All ILI Cases	4
14	Old Harbour H/C	10	All ILI Cases	10
15	Morant Bay H/C	9	All ILI Cases	9
16	Princess Margaret Hospital	5	All ILI Cases	5
17	Isaac Barrant Hospital	4	All ILI Cases	4
18	Christian Pen Health Centre	2	All ILI Cases	-
19	Seaforth Health Centre	1	All ILI Cases	-
20	Yallahs Health Centre	1	All ILI Cases	-
Northeast Regional Health Authority				
1	Port Antonio Health Centre	2	All ILI Cases	2
2	Port Antonio Hospital	22	All ILI Cases	22
3	Brown's Town Health Centre	2	All ILI Cases	2
4	Saint Ann's Bay Hospital	13	10	10
5	Annotto Bay Health Centre	3	All ILI Cases	3
6	Annotto Bay Hospital	3	All ILI Cases	3
7	Highgate Health Centre	5	All ILI Cases	5
8	Oracabessa Health Centre	3	All ILI Cases	3
9	Port Maria Hospital	9	All ILI Cases	9
10	Alexandria Hospital	0	All ILI Cases	-
11	Buff Bay Community Hospital	1	All ILI Cases	-
12	Claremont Health Centre	0	All ILI Cases	-
13	Gayle Health Centre	1	All ILI Cases	-



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Region	Sites	Average ILI /week 2019	Quota	Estimated Weekly Quota
14	Manchioneal Health Centre	1	All ILI Cases	-
15	Moneague Health Centre	0	All ILI Cases	-
16	Ocho Rios Health Centre	1	All ILI Cases	-
17	Port Maria Hospital	0	All ILI Cases	-
18	Saint Ann's Bay Health Centre	0	All ILI Cases	-