

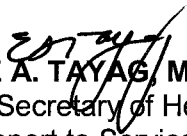


Republic of the Philippines  
Department of Health  
**OFFICE OF THE SECRETARY**

June 20, 2013

**DEPARTMENT MEMORANDUM**  
**NO. 2013 - 0205**

**FOR :** DOH BUREAUS, CENTER FOR HEALTH DEVELOPMENT, HOSPITALS AND ATTACHED AGENCIES, UNITS AND TEAMS DESIGNATED TO WORK FOR THE PREVENTION, CONTAINMENT, AND CONTROL OF THE MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS (MERS-CoV)

**FROM :**  **ENRIQUE A. TAYAG, MD, PHSAE, FPSMID, CESO III**  
Assistant Secretary of Health  
Head, Support to Service Delivery Technical Cluster II

**SUBJECT:** Technical Guidelines Standards, and Other Instructions for Reference in the Surveillance on Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

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Whereas, Republic Act 3573 entitled "Law of Reporting of Communicable Diseases" requires all individuals and health facilities to report notifiable diseases to local and national health authorities.

Whereas, Resolution WHA58.3 (2005) formally adopted the revised International Health Regulations that further urged Member States to carry out surveillance at all levels to diseases or events that may constitute a public health emergency of international concern and contribute fully to international health security.

Whereas, the Department of Health issued Administrative Order 2007-0036 establishing the Philippine Integrated Disease Surveillance and Response (PIDSR) Framework for Reporting of Notifiable Diseases and other Health Events through the National Epidemiology Center (NEC), also the National Focal Point for IHR 2005.

Due to the high concern over the potential spread for sustained person-to-person transmission and spread, and reports of increasing cases and fatalities in the Middle East, the DOH issues the following guidelines and standard procedures namely:

1. **Interim Guidelines on the Enhanced Surveillance on Middle East Respiratory Syndrome Coronavirus (MERS-CoV)**
2. **Interim Guidelines on Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Contact Tracing**

For compliance.



**Republic of the Philippines  
Department of Health  
OFFICE OF THE SECRETARY**

**Interim Guidelines No. 1  
Enhanced Surveillance on Middle East Respiratory Syndrome Coronavirus (MERS-CoV)**

This set of guidelines is issued as reference for all participating health agencies (DOH Central Offices, Regional Centers for Health Development, Research Institute of Tropical Medicine, Bureau of Quarantine, referral hospitals, etc.) and their local counterparts to appreciate, cooperate and participate with regards to the communication flow during special situations for Middle East Respiratory Syndrome Coronavirus (MERS-CoV).

**General Principles**

1. The aim of this surveillance is for early detection of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) outbreaks and for appropriate response when the extent and speed/spread of transmission of the disease among specific populations and in geographic areas is appropriately determined.
2. Surveillance of diseases requires capability for laboratory confirmation of the disease causative agent.
3. As more information is gathered, analyzed and situations changed, surveillance activities are shifted towards long term monitoring of the disease.

**Objective**

1. To describe early epidemiological, virological and clinical characteristics of Middle-East Respiratory Syndrome Coronavirus (MERS-CoV)
2. To establish mechanism for coordination among existing surveillance system in terms of case detection, confirmation, validation, investigation, reporting and feedback.
3. To provide recommendations for preventive and control measures.
4. To provide flow of communication between participating agencies

**Implementing Guidelines**

**PIDSR and Laboratory Surveillance by NEC and RITM**

1. The surveillance of Influenza-like-illness under the regular PIDSR will continue be implemented with the supervision of the NEC. However, in order to enhance the sensitivity of the system to detect early cases of MERS-CoV or signs of human to human transmission, the following activities should be simultaneously performed:
  - a. Weekly analysis of PIDSR Data to determine clustering of ILI/SARI and changes in the epidemiology and mortality associated with the occurrence of ILI in a particular geographic area, and reporting when these occur.
  - b. Reporting of unexplained acute respiratory illness in one or more health workers who provide care for patients with respiratory diseases.
  - c. Reporting of changes noted in response to treatment or in the treatment outcome of those with severe lower respiratory illness.
2. The laboratory-based ILI surveillance maintained by RITM in selected regions shall be utilized to facilitate the collection, storage and transport to RITM of nasopharyngeal and oropharyngeal swab specimens from suspected cases of MERS-CoV admitted to hospitals

only. The designated ILI surveillance officer in coordination with the RESU (regional epidemiology and surveillance unit) shall develop a mechanism to do this.

3. In regions without laboratory based ILI surveillance, the RESU staff shall be responsible in facilitating the collection, storage and transport to RITM of nasopharyngeal and oropharyngeal swab specimens from MERS-CoV suspected cases admitted to hospitals only. Actual collection of specimens shall be done only by trained disease surveillance coordinators.
4. RITM shall designate a point person who will be responsible for reporting laboratory results and other relevant information on cases of MERS-CoV.
5. All reports and rumors of MERS-CoV must be reported to DOH NEC Event Based Surveillance and Response (ESR) 651-7800 loc 2929 for verification.

#### Surveillance by the Bureau of Quarantine

1. The BOQ shall be responsible for entry screening and preliminary investigation of all suspected MERS-CoV cases identified in all ports of entry. These cases should be reported within 24 hours to the corresponding RESU and NEC.
2. BOQ shall provide RESU the passenger manifest and other relevant information in situations where contact tracing is necessary.

#### Role of Hospitals and Other Health Facilities (Clinics, infirmaries, etc) in Surveillance

1. Orient or re-orient hospital/health facility staff regarding mandatory disease reporting requirements, such as those for influenza-like-illness.
2. Designate disease surveillance coordinators who will be responsible for preliminary investigation of suspected cases seen at the hospital, as prescribed by the PIDSR guidelines.
3. Prepare communication system, such as directory of referral hospitals and NEC-ESR, for reporting and referral of suspected MERS-CoV cases.

#### Routine Reporting and Feedback through PIDSR, Lab-Based ILI, ESR and HEARS

1. The surveillance of Influenza-like-illness under the regular PIDSR will continue be implemented with the supervision of the NEC through the RESUs. Information obtained from such system shall follow its usual reporting and feedback mechanisms.
2. The laboratory-based ILI surveillance system maintained by RITM National Influenza Center (RITM NIC) shall follow its usual reporting and feedback mechanisms.
3. The Event-based Surveillance and Health Emergency Alert and Response systems shall maintain its usual reporting and feedback mechanisms.
4. The BOQ shall maintain its usual reporting and feedback mechanisms for international health surveillance.
5. The above five systems shall maintain its usual links concerning reporting and feedback mechanisms.

## Case Investigation

1. All cases shall be investigated using the case definition for Middle East Respiratory Syndrome Coronavirus (MERS-CoV) as stated below:

### Patient Under Investigation

- A person with sudden onset of fever ( $\geq 38^{\circ}\text{C}$  ,  $100.4^{\circ}\text{F}$ ) and cough or sore throat or diarrhea in the absence of other diagnoses AND
- A person with history of travel from the Arabian Peninsula or neighboring countries\* within 14 days OR
- A person who visited any health care facility with a known case of MERS-CoV OR
- Any healthcare worker with signs and symptoms of severe acute respiratory infection (SARI)

### Suspect Case

- A person with sudden onset of fever ( $\geq 38^{\circ}\text{C}$  ,  $100.4^{\circ}\text{F}$ ) and cough or sore throat or diarrhea in the absence of other diagnoses AND
- History of travel from the Arabian Peninsula or neighboring countries\* within 14 days; AND
- Suspicion of pulmonary parenchymal disease (e.g., pneumonia or acute respiratory distress syndrome based on clinical or radiological evidence of consolidation); AND
- Not already explained by any other infection or etiology, including all clinically indicated tests for community-acquired pneumonia\*\* according to local management guidelines.

In addition, the following persons may be considered for evaluation for MERS-CoV infection:

- Persons who develop severe acute lower respiratory illness of known etiology within 14 days after travel from the Arabian Peninsula or neighboring countries\* but do not respond to appropriate therapy; OR
- Persons who develop severe acute lower respiratory illness who are close contacts of a symptomatic traveler who developed fever and acute respiratory illness within 14 days after travel from the Arabian Peninsula or neighboring countries\*. Close contact is defined as providing care for the ill traveler (e.g., a healthcare worker or family member), or having similar close physical contact; or stayed at the same place (e.g. lived with, visited) as the traveler while the traveler was ill.

### Footnotes

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\* Countries considered in the Arabian Peninsula and neighboring include: Bahrain, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian territories, Qatar, Saudi Arabia, Syria, the United Arab Emirates (UAE), and Yemen.

\*\* Examples of respiratory pathogens causing community-acquired pneumonia include influenza A and B, respiratory syncytial virus, *Streptococcus pneumoniae*, and *Legionella pneumophila*.

#### Probable Case

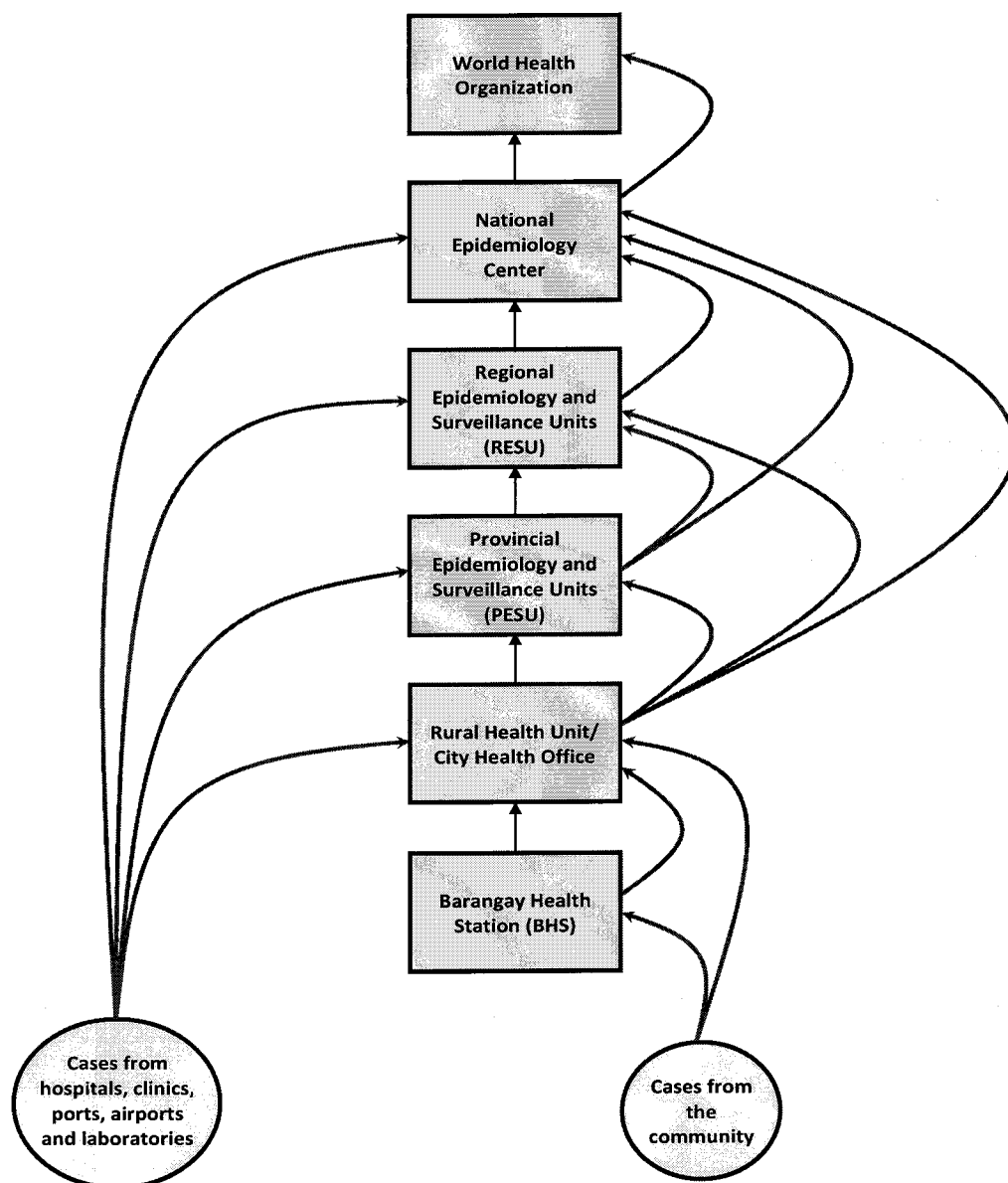
- A person fitting the definition above of a “Suspect Case” with clinical, radiological, or histopathological evidence of pulmonary parenchyma disease (e.g. pneumonia or ARDS) but no possibility of laboratory confirmation either because the patient or samples are not available or there is no testing available for other respiratory infections, AND
- close contact with a laboratory confirmed case, AND
- not already explained by any other infection or etiology, including all clinically indicated tests for community-acquired pneumonia according to local management guidelines.

#### Confirmed Case

- A person with laboratory confirmation of infection with MERS-CoV.
2. The disease surveillance officers of the BOQ at all points of entry shall be responsible for the preliminary assessment of suspected cases. Designated disease surveillance officers in hospitals and other facilities shall be responsible for doing the preliminary assessment of suspected cases in their respective health care facility.
  3. The Case Investigation Form (Annex C) shall be used for all investigations of suspected cases. All other forms in laboratory-based ILI surveillance (RITM), syndromic ILI surveillance (PIDSR) and screening forms of the BOQ shall continue to be used. Failure to provide this form will result in non-acceptance of the specimen brought to RITM.
  4. The laboratory request form of the Research Institute for Tropical Medicine shall be disseminated and continue to be used. Failure to provide this form will result in non-acceptance of the specimen. (Annex D)

#### Case Reporting

1. The notification and reporting of immediately notifiable diseases, syndromes and events shall follow the described in Annex A.1.
2. Weekly reporting of ILI cases under the PIDSR shall be pursued. All epidemiology and surveillance units are required to provide weekly zero reports to the next higher ESU even if no cases are seen during the week. (Annex A.2)
3. Reporting of cases of MERS-CoV shall follow the flow described in Annex B.

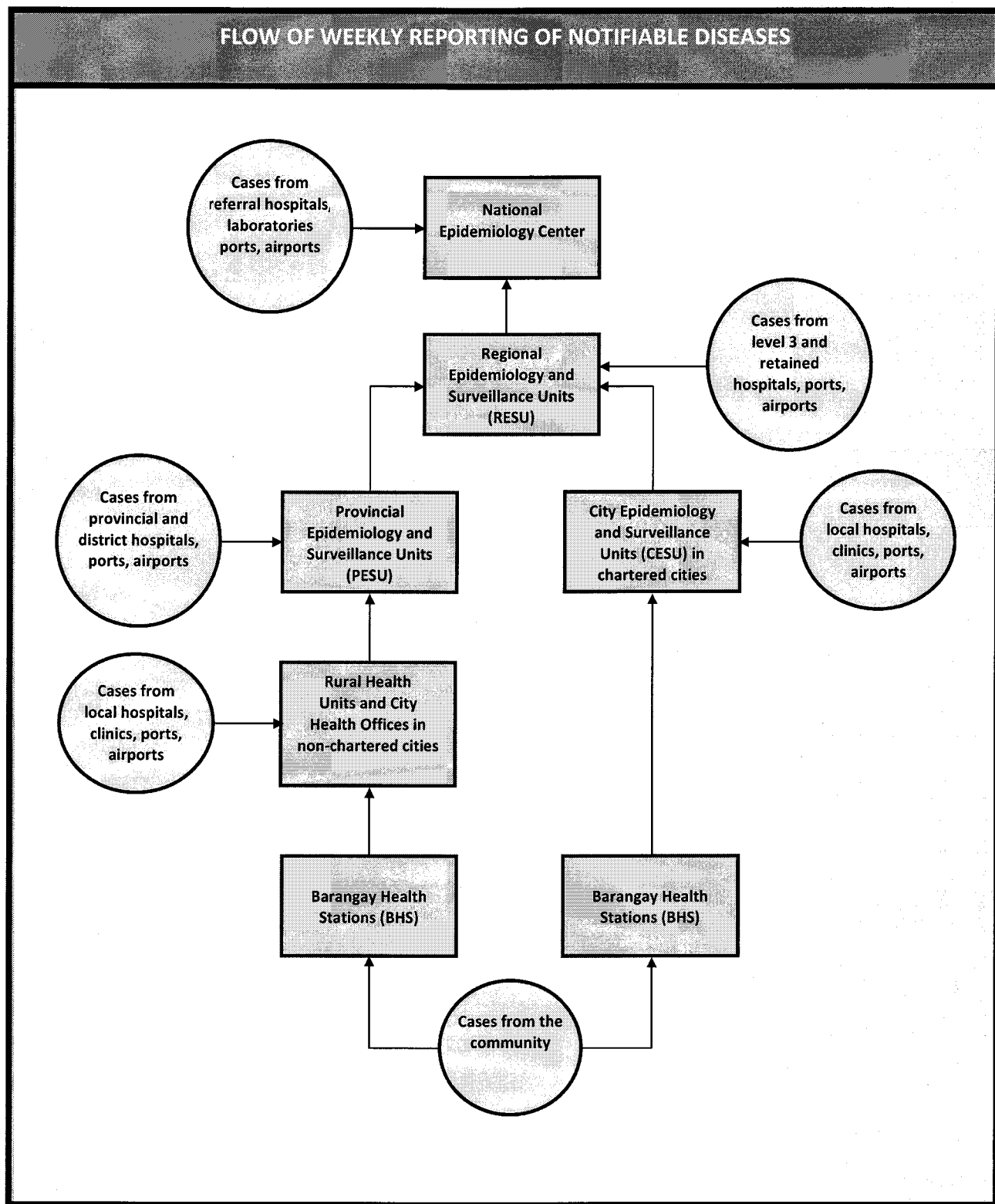
**FLOW OF NOTIFICATION AND REPORTING OF IMMEDIATELY NOTIFIABLE DISEASES, SYNDROMES, AND EVENTS****Legend:**

- Immediate notification (within 24 hours)
- Reporting

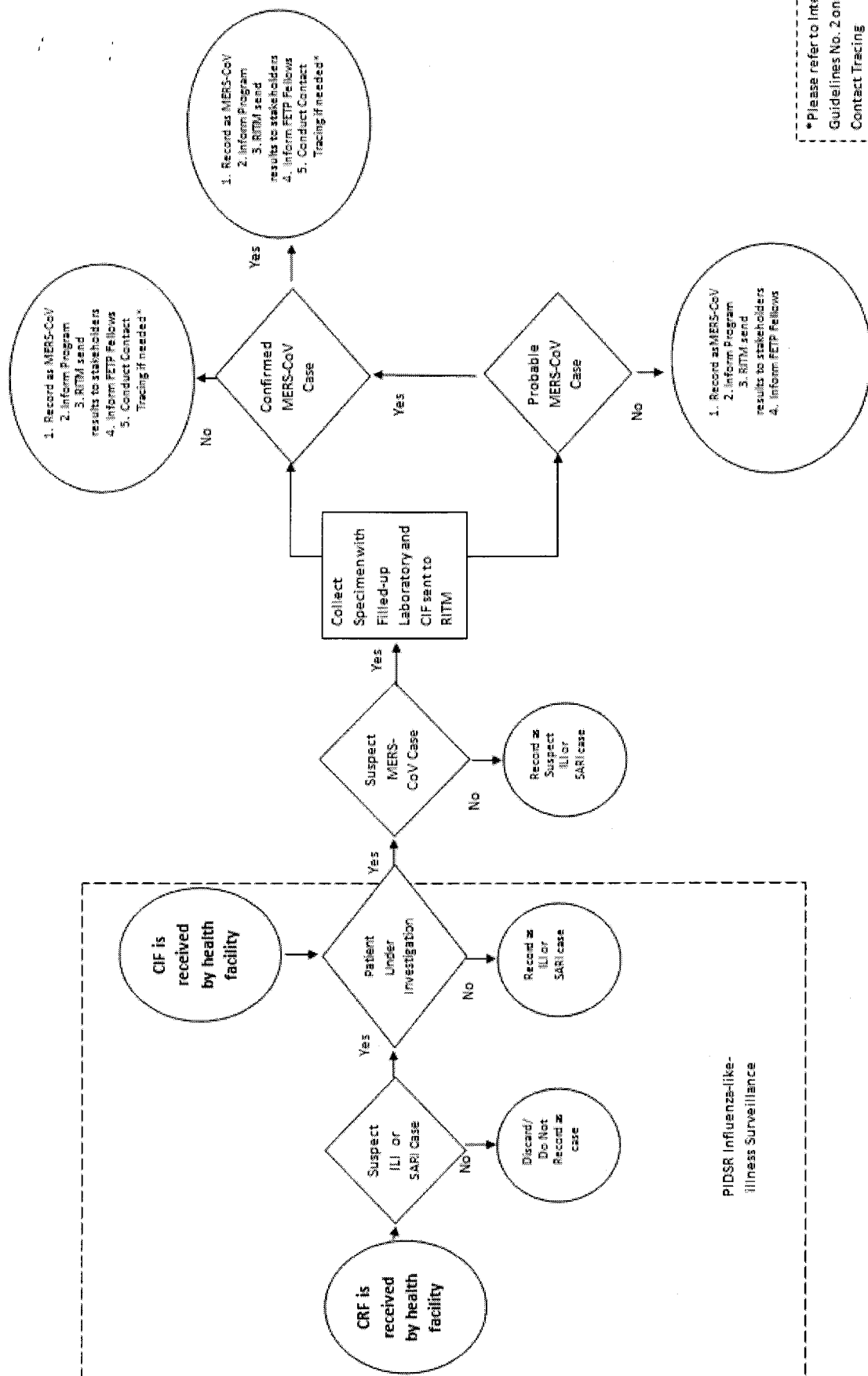


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Annex A.2



## Annex B



\* Please refer to Interim Guidelines No. 2 on Contact Tracing





Case Investigation Form  
**Middle-East Respiratory Syndrome Coronavirus (MERS-CoV)**  
(Annex C)



Disease Reporting Unit/Hospital:		Name of Investigator:		Date of Interview:	
<b>1. Patient Profile</b>					
Last Name	First Name	Middle Name	Birthday:	Age	Sex
Occupation	Civil Status	Nationality	Educational Attainment		
<b>2. Philippine Residence</b>					
House No./Lot/Bldg	Street	District	Municipality/City		
Province	Region	Home Phone No	Cellphone No.		
<b>3. Travel History</b>					
History of travel/visit/work in other countries within last 14 days:	( ) Yes ( ) No		Date of Arrival in Philippines:		
Airlines/Sea vessel	Port of Entry:	Flight/Vessel Number	Time of departure		
<b>4. Overseas Employment Address</b>					
Employer's Name:		Occupation	Place of Work:		
House No./Bldg Name	Street	City/Municipality	District		
Province/State	Country	Office Phone No.	Cellphone No.		
<b>5. Countries Visited / Traveled / Worked in During Last 14 Days (Please check)</b>					
Saudi Arabia ( )	United Arab Emirates ( )	Qatar ( )	Jordan ( )		
Others, specify: _____					
<b>6. Exposure History</b>					
History of Exposure to Known MERS-CoV Case	( ) Yes	( ) No	( ) Unk	Date of Contact with Known MERS-CoV Case:	
<b>7. Clinical Information</b>					
Clinical Status at Time of Report	Inpatient ( )	Outpatient ( )	Dead ( )	Discharged ( )	Unknown ( )
Date of Onset of Illness					
Fever _____ °C	Cough ( )	Shortness / difficulty of breathing ( )	Acute Respiratory Distress Syndrome ( )	Pneumonia ( )	
Others symptoms, specify		Are there any complications? <input type="checkbox"/> Y <input type="checkbox"/> N If YES, specify: _____			
Chest XRAY done? ( ) Yes ( ) No	If yes, when?		MM	DD	YYYY
CXR Results: Pneumonia ( ) Yes ( ) No ( ) Pending			Other Radiologic Findings:		
Date of Onset of Illness	Date of Admission / Consultation		MM	DD	YYYY
Is patient currently on mechanical ventilator?	( ) Yes ( ) No	Was patient previously on mechanical ventilator?	( ) Yes ( ) No		
Name of Informant: (if patient not available)		Relationship:	Phone No.		



Case Investigation Form  
**Middle-East Respiratory Syndrome Coronavirus (MERS-CoV)**

IX. Specimen information					
Specimen collected	If YES, Date Collected	Date sent to RITM	Date received in RITM (to be filled up by RITM)	Virus Isolation Result	PCR Result
<input type="checkbox"/> Serum	___/___/___	___/___/___			
<input type="checkbox"/> Oropharyngeal/ Nasopharyngeal swab?	___/___/___	___/___/___			
<input type="checkbox"/> Others	___/___/___	___/___/___			

X. Final Classification	
<input type="checkbox"/> Patient Under Investigation	<input type="checkbox"/> Suspected MERS-CoV Case
<input type="checkbox"/> Suspected Influenza-like-illness	<input type="checkbox"/> Probable MERS-CoV Case
<input type="checkbox"/> Severe Acute Respiratory Infection	<input type="checkbox"/> Confirmed MERS-CoV Case

XII. OUTCOME:	
<b>Date of Discharge</b>	<b>Final Diagnosis</b>
Condition on Discharge: ( ) Died ( ) Improved ( ) Recovered ( ) Transferred ( ) Absconded	

Patient Under Investigation

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- A person with history of travel from the Arabian Peninsula or neighboring countries\* within 14 days OR
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- Any healthcare worker with signs and symptoms of severe acute respiratory infection (SARI)

Suspect Case

- A person with sudden onset of fever ( $\geq 38^{\circ}\text{C}$  ,  $100.4^{\circ}\text{F}$ ) and cough or sore throat or diarrhea in the absence of other diagnoses AND
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**Footnotes**

\* Countries considered in the Arabian Peninsula and neighboring include: Bahrain, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian territories, Qatar, Saudi Arabia, Syria, the United Arab Emirates (UAE), and Yemen.

\*\* Examples of respiratory pathogens causing community-acquired pneumonia include influenza A and B, respiratory syncytial virus, Streptococcus pneumoniae, and Legionella pneumophila.

Probable Case

- A person fitting the definition above of a "Suspect Case" with clinical, radiological, or histopathological evidence of pulmonary parenchyma disease (e.g. pneumonia or ARDS) but no possibility of laboratory confirmation either because the patient or samples are not available or there is no testing available for other respiratory infections, AND
- close contact with a laboratory confirmed case, AND
- not already explained by any other infection or etiology, including all clinically indicated tests for community-acquired pneumonia according to local management guidelines.

Confirmed Case

- A person with laboratory confirmation of infection with MERS-CoV.





**Republic of the Philippines  
Department of Health  
OFFICE OF THE SECRETARY**

**Interim Guidelines No. 2  
Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Contact-Tracing**

This set of interim guidelines on Middle East Respiratory Syndrome Corona Virus (MERS-CoV) Contact Tracing declares the values, indications, procedures and limitations of contact tracing with regard the Middle East respiratory syndrome coronavirus (MERS-CoV) infection in the country.

**A. Definition**

1. **Contact-tracing** is the identification and diagnosis of persons who may have come into contact with an infected person. Contact tracing plays an important role in containing outbreaks of infectious diseases. The main purposes of contact tracing are to: (1) confirm diagnosis, (2) determine the extent of secondary transmission and (3) identify appropriate control measures for the specific disease.
2. **Contacts** are persons who have had exposure (lived with, worked with, or cared for) exposure to a confirmed case.

**B. General Principles in Contact Tracing for Middle East Respiratory Syndrome Coronavirus (MERS-CoV)**

1. Contact tracing and monitoring is **considered only for the initial cases found at the start of the outbreak**. Given the epidemiologic characteristics of coronaviruses i.e., these viruses are contagious even before the onset of illness and have potential for asymptomatic cases to shed virus, such tracking will not be an effective way to control the outbreak once sustained community transmission in a particular area is established.
2. The goal of timely case and contact identification is to **limit the spread of the Middle East Respiratory Syndrome Coronavirus (MERS-CoV)** to limit the impact of the disease on the health care system.
3. Contact tracing focuses **on the subset of the population most likely to be at risk** of infections and in the network of transmission routes. However, contact tracing interviews should always be voluntary.
4. The public health benefits derived from contact tracing largely depends on the **organizational capacity to ensure quality in the conduct of contact tracing**. When staff or logistics resources are limited, contact tracing becomes ineffective.
5. It is important to **determine the extent of contact tracing to be implemented**. When it is clear that the disease can be passed onto others at a rate faster than that of finding the contacts, it is time to stop contact tracing and move on to direct community-based containment measures.

### **C. Categories of Contacts to be Traced**

**Categories of contacts** to be traced in relation to the overall response to Middle East Respiratory Syndrome Corona Virus (MERS-CoV) are:

- **Category A** – These are close contacts (passengers seated around the seat occupied by the confirmed case, within 3 rows front, back and both sides) to a confirmed case who has had a recent history of travel on board a particular flight or sea vessel.
- **Category B** – These are close contacts (passengers seated around the seat occupied the confirmed case, within 3 rows front, back and both sides) to a confirmed case who likely caused transmission while on a particular flight or public transportation but the confirmed case has left for another country.
- **Category C** – These are persons who have had exposure (lived with, worked with, or cared for) exposure to a confirmed case who developed fever and acute respiratory illness within 14 days after the travel from the Arabian Peninsula or neighboring countries\*
- **Category D** – These are close contacts to a suspect or probable cases who died and are displaying signs and symptoms of the disease within 14 days after the travel from the Arabian Peninsula or neighboring countries\*

#### **Footnotes**

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\* Countries considered in the Arabian Peninsula and neighboring include: Bahrain, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian territories, Qatar, Saudi Arabia, Syria, the United Arab Emirates (UAE), and Yemen.

**D. Contact Identification** – Contact identification is carefully planned and undertaken by trained and skilled epidemiologist and infection control managers whose multiple goals are to obtain information on the clinical and epidemiologic patterns of the virus, enforce control measures and ensure confidentiality, integrity of data/information and public calm.

1. All close contacts of the confirmed case should be identified. Information about close contacts can be obtained from interviews of the patient, family members, workplace or school associates, or others with knowledge about the patient's recent activities and travels.
2. All close contacts should be listed in the close contact line list form (**Annex A**). Each close contact should be given the contact tracing symptom log (**Annex B**) where he/she records his/her symptoms during the 10-day observation period.
3. The Bureau of Quarantine shall immediately provide the Center for Health Development concerned and the National Epidemiology Center with the flight manifest and other pertinent identification documents on close contacts under categories B and C.
4. Contact identification shall be joint activity by the Regional Epidemiology and Surveillance Unit and designated local government (LGU) disease surveillance staff under the technical supervision of NEC.

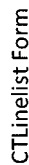
5. Prioritization of contact tracing activities may be necessary if a large number of contacts are eligible for tracing or personnel resources are limited. In such situations it is necessary to focus on those contacts with the highest risk of infection or exposure.

#### **E. Management of Contacts**

1. All close contacts should be asked to take their temperature at least twice daily. The LGU, in coordination with the CHD-RESU, will monitor them by telephone or home visit daily for 10 days to assess the development of symptoms. The surveillance staff should encourage the contacts to record their symptoms in the symptom log form (**Annex B**).
2. Any contact that develops influenza-like illness during the 10-day observation period should be reported **IMMEDIATELY** to the City or Municipal Health Office where the patient resides. The CHO or MHO shall notify immediately of CHD-RESU.

#### **F. Initiation and Termination of Contact Tracing**

1. Contact tracing shall be used as one of the major strategies to contain coronavirus outbreak in the early stage where epidemiological evidence show first and second generation transmission of Middle East Respiratory Syndrome Corona Virus (MERS-CoV) (**Annex C**).
2. Contact tracing for the first 100 confirmed cases in the country is mandatory. This is done in order to obtain complete and accurate epidemiological picture of the disease.
3. Once there is evidence of sustained community transmission (3<sup>rd</sup> or higher generation transmission) in a particular area, contact tracing efforts will provide little benefit in controlling disease spread and should be terminated. At this point, the use of broad community containment measures (e.g., social distancing, school closures) which require fewer resources will provide the most benefit in controlling the spread.



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# MERS-CoV Contact Tracing Line List

Confirmed Case ID: \_\_\_\_\_

Date: \_\_\_\_\_

Region: \_\_\_\_\_

[illegible]

\*Nature of Contact: HH = Household; WS = Work Site; S = School; T = Travel; A = Airplane; HCW = Healthcare Worker; O = Others

CTSL Form

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## MERS-CoV Contact Tracing Symptom Log Sheets

Confirmed Case ID: \_\_\_\_\_ Date: \_\_\_\_\_ Region: \_\_\_\_\_  
Close contact name: \_\_\_\_\_  
Date of Last Exposure: \_\_\_\_\_ Date of Voluntary Quarantine Period Ends\*: \_\_\_\_\_

Symptom	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
No Symptom												
Fever (temp.)												
Cough												
Sore Throat												
Took Antivirals												
Pneumonia												
Diarrhea												
Other symptoms												
1.												
2.												
3.												
Sought Consult												

ANNEX B



## Transmission Generations

What are the implications of the third generation transmission?

- Transmission is on-going
- The transmission could be fast (“superspreading”)
- Need to identify the factors that cause “superspreading”
- Need to implement broad community containment measures

