Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

SEP 0 2 2014

DEPARTMENT MEMORANDUM
No. 2014 - 0260

TO: **DOH BUREAUS, SERVICES, REGIONAL OFFICES, HOSPITALS, THE RESEARCH INSTITUTE FOR TROPICAL MEDICINE AND ATTACHED AGENCIES, ALL SERVICES, UNITS AND TEAMS, DESIGNATED TO WORK FOR THE PREVENTION AND CONTROL OF THE MIDDLE EAST RESPIRATORY CORONOAVIRUS (MERS-COV) AND ALL OTHERS CONCERNED**

SUBJECT: **Interim Guidelines on the Preparedness and Response to MERS-CoV**

Since MERS-CoV was first identified in 2012 in Saudi Arabia, there have been 837 laboratory-confirmed infections including 291 deaths that have been officially reported to the World Health Organization (WHO) as of July 23, 2014.MERS-CoV has affected the following countries: Iran, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia (KSA), United Arab Emirates (UAE) and Yemen in the Middle East and Algeria, Egypt and Tunisia in Africa. Countries in Europe and Asia, including Malaysia and the Philippines, have likewise reported cases.

In assessing the overall risk for the spread of MERS-CoV infections, WHO has so far concluded in its most recent risk assessment as of June 11, 2014 that there is still no evidence of sustained human-to-human transmission in the community. WHO however expects that additional cases will be reported from the Middle East and that it would be likely that cases will continue to be exported to other countries by tourists, travelers, guest workers or pilgrims exposed to human or animal sources (i.e. camels).

In the event of the entry of potential cases of MERS-CoV into the country, an extensive epidemic similar to the SARS multi-country outbreak in 2003 can be averted by providing clear guidelines on public health interventions that can be instituted for the prevention and control of viral respiratory infections such as those caused by these corona viruses. The DOH hereby issues these **Interim Guidelines on Preparedness and Response to MERS-CoV**.

For compliance.

ENRIQUE T. ONA, MD, FPCS, FACS
Secretary of Health

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Interim Guidelines for the Preparedness and Response to MERS-CoV

MERS-CoV stands for "Middle East Respiratory Syndrome Coronavirus." It causes a viral respiratory illness that can lead to a very severe pneumonia and possibly result in sepsis, multi-organ failure and death. The earliest case of MERS-CoV was first identified in June 2012 in Saudi Arabia in a patient who experienced acute pneumonia and renal failure. After the virus was identified, one case from Qatar who was diagnosed in the United Kingdom and a cluster of cases in Jordan from March-April 2012 were retrospectively determined to have been caused by the same virus.

Infection is likely acquired through human-to-human transmission. Primary sporadic cases, which are the first or "index" cases in a documented chain of transmission, are more likely to have been acquired through contact with non-human sources of the virus. MERS-CoV is not the same virus that causes severe acute respiratory syndrome (SARS) but, like the SARS virus, it is most similar to coronaviruses found in insectivorous bats. Another intermediate animal reservoir may be involved and recent studies have shown that MERS-CoV has been detected in camels with at least 7 cases of infection linked to contacts with camels.

Appropriate infection prevention and control measures particularly in health facilities have appeared to limit further transmission to health care workers and hospitalized patients. Transmission from person to person has been well established however sustained human-to-human transmission has not been observed. Adequate isolation and quarantine measures have so far been able to stop outbreaks as limited secondary transmission among clusters suggest that transmission of virus may be readily stopped.

In contact tracing for SARS, the chain of transmission is considered broken at a place of occurrence of an outbreak if 20 days have passed since the last probable case was put in isolation, left the area or died. The government should work towards achieving the absence of local transmission for twice the incubation period in order that both Filipinos and travellers will be free from the risk of acquiring the disease.

After determining the presence of a local outbreak of MERS-CoV that results in a chain of transmission, if there are no further cases detected during 28 days as aided by sensitive surveillance, the virus can be considered eliminated from the human population in the place of occurrence of the outbreak (i.e. level of village/barangay, LGU or even the country).

This manual for preparedness and response to the potential entry of cases of MERS-CoV will help provide guidance for the following:

Preparedness:

1. Strengthening the management structure for the prevention and control of MERS-CoV from the national to the local level
2. Operationalizing the surveillance system for MERS-CoV
3. Enhancing capabilities of health and non-health key people
4. Providing vaccine, once developed and made available, to target groups
5. Ensuring readiness of health facilities, service, manpower and supplies for management of MERS-CoV
6. Ensuring pandemic preparedness of agencies delivering non-health essential services
7. Defining public health interventions to minimize spread of MERS-CoV
8. Strengthening information, education and communication for MERS-CoV
9. Soliciting support from and networking with other government and non-government agencies/ institutions

Response:

Strategic Approaches by Department/Agency:

a. Department of Health
b. Department of Interior and Local Government
c. Department of Foreign Affairs
d. Department of Transportation and Communications
e. Department of Labor and Employment
f. Department of Education
g. Department of Trade and Industry
h. Department of Social Welfare and Development
i. Bureau of Immigration
j. Department of National Defense
k. Armed Forces of the Philippines
l. Philippine National Police
m. Bureau of Fire Protection
n. Philippine Information Agency
o. Philippine Health Insurance Corporation

The document will provide specific preparedness and response guidelines for each area of concern:

a. Philippines Embassies in the Middle East
b. Airplane Flights
c. Ships
d. Points of Entry
e. Community: Surveillance and Contact Tracing
f. Hospitals and other health facilities
g. Lab facilities
h. Public Places and Social Distancing

i. Special Precautions due to Mass Gathering Events (e.g. pilgrimage to Hajj in Mecca, Saudi Arabia)

Definition of terms:

BLHD – Bureau of Local Health Development, DOH

BOQ – Bureau of Quarantine, DOH

Chain of transmission – a documented linkage of direct human-to-human transmission of a microorganism that leads to an infection

Contacts - persons who have had exposure (lived with, worked with, or cared for) exposure to a confirmed case.

Contact-tracing - 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.

Epidemic - an increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area

Index Case – see definition for ***primary case***

ILI – influenza-like illness; a catchall term used in the surveillance of influenza and similar acute respiratory infections with the following symptoms: fever and cough and/or sore throat in the absence of a known cause other than influenza

MERS-CoV – Middle East Respiratory Syndrome Coronavirus

NCDPC – National Center for Disease Prevention and Control, DOH

NCHFD – National Center for Health Facilities Development, DOH

NCHP – National Center for Health Promotion, DOH

NEC – National Epidemiology Center, DOH

Outbreak - carries the same definition of epidemic, but is often used for a more limited geographic area

PHIC – Philippine Health Insurance Corpordation (PhilHealth)

PIDSR – Philippine Integrated Disease Surveillance and Response (NEC-DOH)

Primary Case – a case of an infection that brings the disease to a population in an area and is documented to be the first case during the conduct of an epidemiological investigation; the same as an ***index case***

RESU – Regional Epidemiology and Surveillance Unit, Centers for Health Development, DOH

RITM – Research Institute for Tropical Medicine, DOH

SARI – severe acute respiratory infection; acute respiratory infection leading to severe illness progression necessitating ICU admission or ventilatory assistance with potential exposure to a virus or any microoganism

SARS – Severe Acute Respiratory Syndrome

Secondary Case – persons infected by a primary or index case in the population

Virus – is a submicroscopic agent of an infectious disease; capable of growth and multiplication only in living cells and can cause several important diseases in humans, animals or plants

Pandemic - an epidemic that has spread over several countries or continents, usually affecting a large number of people

Zoonosis – a disease or infection that is naturally transmissible from vertebrate animals to humans and vice-versa under natural conditions (e.g. rabies, avian influenza)

Guidelines for Preparedness for MERS-CoV

1. **Strengthening the management structure and command system for the prevention and control of MERS-CoV from the national to the local level**

Objectives	Actions	Lead/ collaborating agencies/ offices
1. To strengthen command and management structure from the national to the local level	• Organize Inter-agency Task Force for MERS-CoV • Organize DOH Core Group for Surveillance, Preparedness and Response to MERS-CoV • Organize Management Committee for Emerging and Re-emerging Infectious Disease (to cover MERS-CoV as well) • Organize a national body that will handle matters on zoonosis • Coordinate and involve other agencies in planning • Conduct meetings among DOH, DFA, DOLE, DILG, DA, DENR, and other DOH offices	• DOH • NDRRMC • PMS
2. To lobby to decision-makers commitment for support and funding for preparedness for MERS-CoV and other potential public health threats of national and international scope	• Representation to the Cabinet • Representation to the NDRRMC • Representation to PCSO and other funding agencies • Representation to technical staff of other agencies	• Office of the Secretary (OSEC), DOH • NCDPC, DOH • HEMS, DOH
3. To organize a group to review and update MERS-CoV guidelines as the need	• Designate organization/individuals responsible for formulating and revising the MERS-CoV guidelines • Identify individuals and representatives from all organizations that will need to	• DOH OSEC • Management Committee for Prevention and Control

Objectives	Actions	Lead/ collaborating agencies/ offices
arises	contribute to the plan • MOA among identified agencies • Agreement for scheduled meetings	of Emerging and Re-emerging Infections
4. To develop plan, systems, policies, standards and guidelines for MERS-CoV	• Workshops/ Writeshops for drafting the MERS-CoV preparedness and response plans of each concerned department and attached agencies • Realistic timeline of implementation plan	• NCDPC, DOH • Other key DOH Offices • Other government and non-government offices
5. To have a clear command and control system from the national to the local level in the event of outbreaks	• Executive Order defining the roles and functions of various agencies in the event of MERS-CoV • Identification of members of the Inter-agency Task Force - National, Regional, Provincial and City levels • Mobilization of the Management Committee of DOH for emerging infectious diseases preparedness and response • Consensus and coordination among DOH and the Local Chief Executives of the areas affected	• DOH OSEC • NCDPC, DOH
6. To assist local government units prepare for MERS-CoV	• Assist LGUs in formulating local preparedness and response plan • Organize and mobilize local task forces and monitoring and response teams in the communities • Facilitate availability and procurement of personal protective equipment and supplies, namely, disposable caps, N95 masks, gloves and plastic body shields, plastic bags for disposal, disinfectants	• DOH • DILG through their regional offices

2. Operationalizing the surveillance system for MERS-CoV

Objectives	Actions	Lead/ collaborating agencies/ offices
1. To develop and operationalize surveillance of MERS-CoV	• Development and regular review of case definitions for MERS-CoV infection • Guidelines on reporting, collection of specimens, infection control Identify persons/ strengthen coordination • Conduct of training	• NEC,DOH • RESUs • LGUs: CHOs/PHOs/ MHOs
2. To enhance surveillance of MERS-CoV	• Establish surveillance for MERS-CoV *Case definition* - Hospital Surveillance - Laboratory-based Surveillance - Other Information sources (i.e. embassies, media, social media) • Capability building for surveillance (for all levels) • Surveillance to include the following group: - Travelers - Health care worker - Laboratory workers • Guidelines on reporting and recording	• NEC, DOH • RESUs • RITM, DOH Partners: WHO, Other International Agencies
3. To strengthen early warning system for MERS-CoV	• Conduct rumor surveillance/event-based surveillance • Formulate criteria for scaling up and down of surveillance	• NEC, DOH • RESUs Partner: WHO
4. To strengthen laboratory capabilities for MERS-CoV	• Establish RITM as the National Reference Laboratory for MERS-CoV • Assess capacity of existing lab facilities BSL3 • Strengthen protocols, referral and transport system of specimens from the local to the National Reference Laboratory • Plan for storage of clinical specimen • Submit proposals for funding of	• RITM, DOH • NCHFD, DOH • Regional laboratories Partner: WHO

Objectives	Actions	Lead/ collaborating agencies/ offices
	laboratory needs • Develop of diagnostic assays for MERS-CoV • Identify personnel, reagents and funding for increased testing surge capacity • Decisions on sharing clinical materials from confirmed cases of MERS-CoV • Provide update advice on test results and coordination with referring health facilities for the transmission of results • Development of lab website • Provision of equipment and supplies to priority areas for collection, storage and transport of specimens from cases under investigation. • Bio-security	
5. To define protocols on surveillance during an extensive epidemic	• Continue regular surveillance but at the same time establish the early warning system in hospitals and communities • Set case definitions for early warning system • Monitor hospital admissions based on agreed case definitions • Monitor the following: - Deaths - Recovery cases - Vaccine Usage - Antiviral use - Adverse reactions from medicines and vaccines	• NEC, DOH • RESUs • Hospitals, Medical Specialties

3. Enhancing capabilities of health and non-health key personnel

Objectives	Actions	Lead/ collaborating agencies/ offices

Objectives	Actions	Lead/ collaborating agencies/ offices
1. To strengthen the capabilities of sub-national offices and assist LGUs on surveillance and appropriate response to MERS-CoV	• Develop/ reproduce training materials on MERS-CoV • Orient DOH staff from the national and regional offices on Preparedness and Response to MERS-CoV	• DOH Task Force
	• Train key regional personnel on epidemiology surveillance and reporting (i.e. as per PIDSR guidelines)	• DOH
	• Train Provincial/ City Response Teams (PHOs, CHOs, Hospital Chiefs)	• DOH • DILG
	• Train Municipal Health Officers • Train Municipal & Barangay Health Emergency Response Teams	• DOH Regional Offices
	• Train RESUs on GIS and On-line reporting	• NEC, DOH
2. To strengthen capabilities of hospitals in responding to MERS-CoV	• Develop/ Reproduce training materials	• NCHFD , DOH
	• Update key staff of National Referral Hospitals and Regional Hospital and Medical Centers on Management and IC	• NCHFD, DOH • NCDPC, DOH
	• Train Provincial, City Hospitals, District and Municipal Hospitals	• CHDs
	• Provision of Personal Protective Equipment (additional PPE for replenishment of stocks)	• Hospital Administrators
3. To strengthen capabilities of government facilities to attain prescribed levels of capability for laboratory diagnosis of emerging infections	• Identify capabilities at different level	• NCHFD, DOH
	• Develop and reproduce training module	• NCHFD, DOH • RITM , DOH
	• Train laboratory staff and response team for the collection, storage and transport of specimens • Train laboratory staff in facilities that will be prepared as referral or reference laboratories	• RITM, DOH • Regional Referral Hospitals
4. To strengthen capabilities of	• Train spokespersons, heads of key offices on risk communication	• NCHP, DOH

Objectives	Actions	Lead/ collaborating agencies/ offices
key staff on risk communication	• Train staff on risk communication planning	• NCDPC, DOH • PIA

4. Providing vaccine (once developed) to high-risk groups

Objectives	Actions	Lead/ collaborating agencies/ offices
1. To formulate guidelines on vaccination for MERS-CoV	• Formulate guidelines in consultation with the private sector • Develop the implementing guidelines (adopt guidelines from EPI Program for vaccine-preventable diseases) on administration, distribution strategy of the vaccine, monitoring	• NCDPC, DOH • NCHFD, DOH • Hospitals • Specialty Organizations
2. To develop funding strategy for routine MERS-CoV vaccination policy	• Advocate to LGUs for funding • Develop a benefit package for health care workers and members of PhilHealth	• BLHD, DOH • NCDPC, DOH • PHIC
3. To facilitate provision of MERS-CoV vaccine in the Philippines	• Initiatives to make the MERS-CoV vaccine accessible to persons at high risk for MERS-CoV (e.g. health care workers) • Develop a contingency plan for procuring the vaccine or management of an epidemic without MERS-CoV vaccine available • MOA with vaccine companies for arrangements on vaccine availability during an extensive epidemic	• NCDPC, DOH • Specialty Organizations, • FDA • Vaccine companies

5. Ensuring readiness of health facilities, service, manpower and supplies for management of MERS-CoV

Objectives	Actions	Lead/ collaborating agencies/ offices
1. To develop policies, guidelines and protocols and strengthen systems on appropriate response to and management of MERS-CoV	• Develop guidelines and protocols for appropriate response to and management of MERS-CoV • Adjust standards for health facilities and clinical management prepared for the SARS program • Adapt Clinical Practice Guidelines (CPG) of Philippine Society for Microbiology and Infectious Diseases (PSMID) and Pediatric Infectious Disease Society of the Philippines (PIDSP) on antibiotic and antiviral use • Develop checklist for preparedness of health care facilities • Develop protocol for the appropriate disposal of dead bodies • Consultative meetings with specialty organizations • Conduct refresher courses on infection control for HCWs • Conduct basic training for infection control for volunteers	• NCDPC, DOH • NCHFD, DOH • BLHD, DOH • PHICS • PSMID • PPS • PIDSP • PHA • PMA • other medical/ paramedical organizations
2. To ensure availability/readiness of health facilities for management of MERS-CoV	HEALTH SERVICE FACILITIES • Adopt AO 134 (Strengthen the functionality of the existing referral system on each level of health care facilities) • Determine potential alternative sites for medical care • Determine and coordinate for alternative sites for medical care, e.g., use of schools, tents, military facilities • Coordinate clinical care and health services plans	• NCHFD, DOH • HEMS, DOH • NCDPC, DOH • Hospital Administrators, (Private and Government) • LGUs

Objectives	Actions	Lead/ collaborating agencies/ offices
	• Develop executive order to facilitate transit from one political area to another • Advocate to Local Chief Executives, government and private hospital administrators on the health facilities and services that need to be prepared	
3. To ensure availability of health manpower in the event of an extensive epidemic of MERS-CoV	*HEALTH SERVICE HUMAN RESOURCES* • Identify community support groups for health human resources augmentation • Maintain/update a directory of contact persons at the national level and of government and private medical practitioners and paramedical workers at the local level • Hospitals and health centers to arrange places and schedule of duties during an extensive epidemic with a regular updating • Develop a policies/guidelines on - Deciding on suitability of volunteers - Accepting and training for defined health care roles for volunteers - Liability, insurance and temporary licensing issues for retired health care workers and volunteers • Arrange with PRC for a memorandum allowing retired health care workers and volunteers to practice their profession in case of an extensive epidemic • Develop guidelines or policy prepared by the Legal Group for the Memorandum of	• HEMS, DOH • BLHD, DOH • NCHFD, DOH • NCDPC, DOH • CHDs • LGUs • PMA • PHA • PNA • IMAP • Specialty organizations • Hospital administrators • Professional Regulations Commission • DSWD • Legal Officers of involved agencies • PNRC

Objectives	Actions	Lead/ collaborating agencies/ offices
	agreement between the national offices of organizations and the Department of Health • Social mobilization of professional organizations, unions and NGOs for volunteerism during an extensive epidemic • Involve DSWD for the provision of social services and counseling services related to the epidemic • Develop a contingency plan to provide food and other provisions for health personnel and volunteers rendering service during an extensive epidemic	
4. To facilitate availability of medical supplies during an extensive epidemic.	• Develop a protocol/guidelines to fast-track procurement of emergency medical supplies and drugs, including PPE • Mobilize resources from NGOs and donor agencies for additional supplies • Develop a guideline/protocol for determining the level of care appropriate for primary alternative health care facilities and criteria for provision of equipment and supplies (schools, churches, military, etc.) – IV insertion, observation	• NCDPC, DOH • NCHFD, DOH • Procurement and Logistics Service, DOH

6. Ensuring preparedness MERS-CoV of agencies delivering non-health essential services

Objectives	Actions	Lead/ collaborating agencies/ offices
1. To advocate and assist agencies/ institutions providing non-health services in developing contingency plans to ensure services during an extensive epidemic (e.g., banks, utilities, markets)	• Identify non-health essential services providers whose absence would pose a serious threat to public safety • Provide guidance on the preparation of contingency plans of concerned agencies • Consultative meetings with the heads of concerned agencies	• HEMS, DOH • NCDPC, DOH • DND • PNP • DILG • NDCC • PNRC
2. To develop a protection program for non-health essential service providers	• Decisions on use of antiviral agents and MERS-CoV vaccine for non-health essential service providers • Discussions on use of Personal Protective Equipment • Information materials on personal hygiene and other measures to prevent illness	• DOH
3. To prepare contingency plan to ensure the delivery of essential services.	• Estimate the number and list of personnel whose absence will pose a threat to public safety or will interfere in the appropriate response to a pandemic • Determine the minimum number necessary for a sustained epidemic response • Identify personnel who may be available to assist in the maintenance of essential non-health care services. • Develop a back-up system for personnel to maintain services during an extensive epidemic • Seek assistance from non-government organizations, the church, military or volunteers	National offices/organizations concerned like • PNP • AFP • BFP • ATO-DOTC • DOE • energy and water service providers • local government units • Business sector

Objectives	Actions	Lead/ collaborating agencies/ offices
	groups for replacement of personnel. • Prepare licensing/ temporary permits to volunteers and workers. • Discuss with professional organizations and other health essential services the plan to ensure delivery of appropriate services	

7. **Defining public health interventions to minimize spread of MERS-CoV**

Objectives	Actions	Lead/ collaborating agencies/ offices
1. To have a clear plan of action when there are cases of MERS-CoV in an epidemic in the community	• Define specific courses of action on community response, referral and transport of avian influenza cases • Define specific public health interventions in schools, workplace, community and other settings • Develop information materials/ guidelines for use of LGUs and communities • Develop a communication plan for public health interventions • Conduct meeting with airport and seaport authorities on entry and exit management of passengers • Conduct meetings with the other agencies like DILG, DepEd, DOLE, DSWD, PNP, DND for support and action and also to define their specific roles during outbreaks	• NCDPC, DOH • NCHP, DOH • BLHD, DOH • BQ, DOH • CHDs • DepEd • DILG • DOLE • DSWD • PNRC • PNP • DND • PIA • Airport/seaport Authorities

8. Strengthening information, education and communication for MERS-CoV

Objectives	Actions	Lead/ collaborating agencies/ offices
1. To strengthen communication links with international organizations and embassies	• Communicate with international organizations / offices and embassies • Coordinate with DFA • Provide update and on government's efforts to embassies/ diplomatic corps	• NCDPC, DOH • NEC, DOH • DFA
2. To strengthen communication links with national organizations	• Designate a representative to liaise with senior bureaucrats and politicians in health and other areas • Identify and maintain directory of contact persons • Mechanism for distribution of information between national bodies • Link with national communication network represented by government agencies • Provide update on MERS-CoV • Identify their specific roles and tasks n the event of a MERS-CoV epidemic	• NCDPC, DOH • HEM, DOH
3. To ensure communication with regional and local governments	• Develop a national directory of hospital administrators, DOH Central Office and Regional key staff for Emerging Infections • Provide information to regional coordinators through e-mails, DOH website, text message • Identify/ Conduct training of speakers, regional coordinators, city and provincial coordinators • Zonal Pandemic Conferences with webcast • LGUs reporting events	• NCDPC, DOH • NEC, DOH • NCHP, DOH • IMS, DOH
4. To strengthen communication links with news media	• Educate/orient media to report news responsibly • Conduct media summit • Conduct regular press briefing	• NCHP, DOH • MRU • PIA

5. To develop a multi-phase communication plan	• Identify specific key messages and prototype materials for each stage of MERS-CoV • Develop audience-based IEC materials • Coordinate with other groups for dissemination of information • Disseminate through websites, press releases, media interviews • Develop national risk communication plan	• NCHP, DOH • MRU • NCDPC, DOH
6. To disseminate information on the prevention and control of MERS-CoV	• Develop prototype materials for various target audiences and identify/package information for circulation through the website • Conduct information campaigns (Regional Summits) with LGEs and health officers as target audience • Conduct information campaigns in elementary and high schools	• DOH • DepEd

9. Soliciting support from and networking with other government and non-government agencies/ institutions

Objectives	Actions	Lead/ collaborating agencies/ offices
1. To define critical roles, functions and tasks of various agencies in preparedness and response to a MERS-CoV epidemic	• Formulation of roles, tasks and functions	Involved agencies
2. To provide a forum for agencies to exchange information and updates	• Meetings • Consultations	• DA • DOH • NDCC
3. To formulate plans, guidelines,	• Meetings, writeshops	Involved agencies

communication plan in their respective agencies		
4. To identify financial, technical, and logistic support that can be mobilized during outbreaks of MERS-CoV	• Meetings with partner agencies • Medical/ paramedical associations • Key non-government organizations • Inventory of manpower and logistics	• NDCC • NSC • DOH • DA • DILG

Response:

Strategic Approaches by Department/Agency:

Department of Health (DOH):

Office of the Secretary: As Crisis Manager, the **Secretary of Health** is likewise empowered to enlist the support of the **Armed Forces of the Philippines (AFP)**, the **Philippine National Police (PNP)** and the **Philippine Coast Guard (PCG)** for the purpose of enforcing the quarantine of specific areas or facilitating the transport and conduction of patients to referral centers.

Quarantine and Immediate Containment of MERS-COV within Ports of Entry. - Pursuant to Sections 4 and 5 of the Quarantine Act of 2004, the **Bureau of Quarantine (BOQ)**, subject to the control and supervision of the Department of Health, is authorized to promulgate and enforce rules and regulations necessary to prevent the introduction, transmission or spread of Public Health Emergencies of International Concern from foreign countries into the Philippines or from one domestic seaport/airport to another. The BOQ will develop protocols for the management of inbound and outbound passengers and guidelines in the handling of suspect cases among passengers as the need arises. Intervention strategies to be implemented include the following:

1. The conduct of health education on MERS-CoV, the dissemination of case definitions of MERS-CoV and the issuance of advisories and its dissemination to all quarantine medical officers and quarantine stations

2. The surveillance, apprehension, detention or isolation of both suspected and confirmed cases for the purpose of preventing the introduction, transmission or spread of such public health emergencies of international concern as specified from time to time in Department Orders by the Secretary of Health upon the recommendation of international health surveillance and the Task Force on MERS-CoV

3. The enforcement of areas of containment within ports of entry to complement isolation measures in quarantine stations, grounds and anchorages to limit the potential spread of MERS-COV

4. The inspection, fumigation, disinfection, pest extermination of aircraft and sea vessels

5. The vaccination for international travel and medical examination of aliens/foreigners

6. The destruction of animals or articles found to be infected or contaminated as to be sources of infection to human beings in coordination with other concerned quarantine agencies such as

veterinary quarantine of the Bureau of Animal Industry and plant quarantine of the Bureau of Plant Industry both of the Department of Agriculture

7. Coordination with quarantine officials in conducting surveillance for MERS-CoV in other countries and coordination with the National Epidemiology Center for passengers admitted for testing and quarantine

Epidemiological Investigation and Contact Tracing. – As the lead health agency in the investigation and establishment of disease surveillance in the country, the **National Epidemiology Center (NEC)**, in coordination with the **Regional Epidemiology and Surveillance Units (RESU)**, and under the control and supervision of the Secretary of Health, shall initiate the coordination with the BOQ, government and private hospitals, migrant labor agencies, the Department of Foreign Affairs, the Department of Interior and Local Government, the Philippine National Police and the Armed Forces of the Philippines in the identification of individuals who are suspected to be potential cases or carriers of MERS-COV.

Being the National Focal Point for International Health Regulations, they shall also officially coordinate with the World Health Organization in obtaining information about MERS-CoV abroad as well as report any potential cases, outbreaks of MERS-CoV in the country. This agency is also tasked to undertake the following:

1. The development of case definitions and guidelines for surveillance and epidemiologic response related to MERS-CoV, as well as the conduct of orientations and trainings to improve the capacity of health officials for surveillance and response

2. The assessment of the risk of spread of disease beyond the ports of entry under the jurisdiction of the BOQ

3. The assessment of the risk of spread within and among communities in cities and municipalities

4. The conduct of epidemiologic investigations in determining the whereabouts and movements of index cases of disease and the tracing of contacts of these contacts

5. The coordination with the National Center for Disease Prevention and Control, BOQ, the Centers of Health Development, government and private hospitals and other health agencies and facilities regarding the recognition of the threat of disease spread to aid in the monitoring of the implementation of activities of the Emerging and Re-emerging Infectious Disease Program

6. The regular and timely submission of reports and updates on the status of disease spread within the community to the President, the Secretary of Health or any designated point person in order to assist the Task Force in determining the potential risk of spread of disease and the progress of public health measures to control the disease

Treatment of Infected Cases and Containment of Affected Areas. - The Secretary of Health, through the **National Center for Health Facilities and Development (NCHFD)** and the **Centers of Health Development (CHD)** and the **Health Emergency Management Service (HEMS)**, shall implement the necessary measures to isolate, treat, and manage both confirmed and suspected cases of MERS-COV in hospitals, health centers, quarantine areas, and such other areas where confirmed and suspected cases are found or have been isolated with due regard to the health and well-being of the victims and all those in contact with them, including the communities within the vicinity.

Designated DOH hospitals are tasked to admit patients for hospital quarantine and clinical management and will aid in the referral of patients for laboratory testing and reporting to the Regional Epidemiology and Surveillance Units. DOH hospitals will issue medical certificates and clearances upon request of patients.

The **Research Institute for Tropical Medicine (RITM)** will conduct confirmatory testing of cases of MERS-COV and coordinate the reporting of results with the National Epidemiology Center. RITM will manage the pick-up of specimens from identified areas. Patients will be admitted to RITM for hospital isolation and/or clinical management. It will also help capacitate other laboratories and other DOH hospitals with regards to confirmatory testing and infection control.

In coordinating the response, HEMS will preside and maintain an **operations center (OPCEN)** that will serve as the contact point for information related to coordinating within the DOH and among different agencies. The responsibility for information management and the submission of reports will be coursed in coordination with the National Epidemiology Center. Logistics management will be coordinated with the **National Center for Disease Prevention and Control (NCDPC)**.

Management of the Emerging and Re-emerging Infectious Disease Program. – The **NCDPC** through the **Infectious Disease Office (IDO)**, under the control and supervision of the Secretary of Health, shall manage the planning and operations of the Emerging and Re-emerging Infectious Disease Program. In coordination with the **Health Policy Development and Planning Bureau (HPDPB)**, appropriate policies and guidelines will be developed pertaining to the prevention and control of MERS-COV. The Center is also tasked to undertake the following:

1. The preparation and facilitation of the program budget plan and the identification of other potential sources of funding support to augment the budgetary needs of the program
2. The planning and management of logistics in preparing and responding to epidemics of MERS-COV, including the allocation and deployment of: Personal Protective Equipment (PPE), drugs and medicines, vaccines and ancillaries
3. The regular coordination with the BOQ and the NEC in determining program needs and the prioritization of public health measures to avert the occurrence or the spread of epidemics within the country
4. The coordination with other National Line Agencies and International Agencies to help in the implementation of preparedness and response measures to limit the spread of MERS-COV
5. The preparation and facilitation of relevant documents for meetings of the Task Force on MERS-CoV as well as overseeing the documentation of the minutes of the Task Force by serving as the Secretariat

Risk Communication before and during a Crisis. **–** The **National Center for Health Promotion (NCHP)** will be tasked to develop a risk communication plan and IEC materials for the general public, the media as well as the medical community. An advocacy campaign for awareness on MERS-CoV will be launched to help promote appropriate health behaviors prior and during the spread of MERS-CoV. A pool of speakers will be developed to manage the needs of the media for information and updates as coordinated through the DOH **Media Relations Unit (MRU)**. Press releases, press statements, press conferences and radio/TV guestings of experts will be coursed through the MRU.

Department of the Interior and Local Government (DILG) – The Secretary of the Interior and Local Government, upon the recommendation of the Secretary of Health, shall be responsible for mobilizing the community particularly the barangays by directing the local government units (LGUs) to monitor the health situation in their respective jurisdictions. The DILG will assist the DOH in contract tracing by mobilizing the PNP and by exercising supervision over local governments for the duration of a crisis related to the spread of MERS-COV. This assistance shall be inclusive of facilitating the isolation and control of quarantine areas, the maintenance of peace and order related to the management of the areas affected or lending support, augmentation, and assistance to directives lawfully issued in relation to the management and control of each crisis. LGUs will be encouraged to pass local ordinances for strict observance of hygiene, sanitation and social distancing if needed.

Upon the recommendation of the Secretary of Health, the DILG will also direct the LGUs to provide assistance in the transport and conduction of patients who are referred to or admitted in hospitals or health centers for isolation and treatment. Community volunteers and barangay brigades will

also be mobilized to conduct house to house cleanliness campaigns that will serve also as educational campaigns to increase awareness of MERS-CoV.

Department of Foreign Affairs (DFA) – The DFA shall coordinate with our embassies, consulates and missions to obtain information from overseas Filipinos about the general health situation of Filipino communities as well as the individual medical condition that had been called to the embassies' attention. The DFA is also tasked with gathering useful information on the situation of countries with regards to outbreaks and epidemics by relying on its network of their colleagues in foreign governments, embassies and consulates about the potential threat to overseas Filipinos. Such information will be shared with the Task Force and the DOH in determining the implications for travel and trade. When necessary, the DFA can recommend the implementation of travel and trade restrictions depending on the situation. Coordination with DOLE, POEA and OWWA is needed to ensure the protection and welfare of Filipinos working abroad.

The DFA will also provide travel advisories, and such other measures and processes which would help prevent the entry into the country of Filipinos or foreign nationals suspected of having contracted an MERS-COV in their respective places of employment or in foreign ports of embarkation. Foreign service officials will be oriented on MERS-CoV and measures to prevent contracting possible MERS-CoV.

Department of Labor and Employment (DOLE), the Overseas Workers Welfare Administration (OWWA) and the Philippine Overseas Employment Administration (POEA) - DOLE shall be responsible for providing information through the Pre-Departure Orientation Seminar (PDOS) and Pre-Employment Seminar to those departing the Philippines and bound for affected countries or bound for countries in danger of being affected by an epidemic of an MERS-COV. These agencies will also issue advisories to recruitment agencies and employers and distribute information materials through the Philippine Overseas Labor Offices (POLOs).

When so determined by the Secretary of Health and when public safety may require, the departure of persons may be prevented in those areas deemed affected. The DOLE shall provide updates on the status of Overseas Filipino Workers and likewise monitor the entry of overseas Filipino workers who may be deemed as a threat to public health and provide the necessary contact details to assist in contact tracing of individuals who may have been exposed to an MERS-COV.

Department of Education (DepEd) - The DepEd shall order the closure of schools, institutions of learning, vocational, technical or otherwise, including that of private institutions of learning, or the suspension of classes, or otherwise utilize such buildings and edifices for purposes of containing or managing an epidemic of an MERS-COV, when so

determined and upon the advice of the Secretary of Health and the Task Force. DepEd shall also help in the dissemination of information and advisories among teachers and students.

Department of Agriculture (DA) – The DA and its attached bureaus and agencies shall coordinate closely with the DOH in assessing the potential risks of the spread of zoonotic diseases to humans. Information on suspected incidents of transmission of such diseases shall be shared with the DOH including affected areas and individuals, risk of spread outside areas of animal quarantine and results of laboratory confirmation.

Department of Transportation and Communications (DOTC) - The DOTC shall oversee that infrastructure facilities such as airports, seaports and other transportation terminals be available in the implementation of this Executive Order. When the public safety requires, as may be determined by the Secretary of Health, the DOTC shall control the entry and exit of aircraft, seacraft and other forms of transportation, to prevent the introduction, transmission and spread of MERS-CoV in the country.

Department of Social Welfare and Development (DSWD) – The DSWD will assist in the referral of suspected cases for possible surveillance and contact tracing and will advise potential patients to go to the nearest health facility. In the event of an epidemic that would require a quarantine to be enforced, the DSWD will help provide essential needs like food and water to affected communities and psychosocial and counseling services. In preparing the community for a potential outbreak or epidemic, social workers can aid in the conduct of information and dissemination campaigns for MERS-CoV by the inclusion of hygiene and sanitation into their trainings.

Department of Trade and Industry - The DTI shall undertake measures to prevent profiteering activities and other unscrupulous practices which are inimical to the public with regards to having the necessary drugs and medicines and personal protective equipment available to the public.

Bureau of Immigration (BI) - The Bureau of Immigration (BI) shall conduct strict arrival and departure inspections including secondary inspections on passengers going to and coming from affected countries and the appropriate filling up of health checklist forms. The BI shall maintain complete arrival and departure records of travelers arriving from and departing for affected countries and shall provide an accurate list of passengers, with contact details, of flights identified to have potentially suspected or confirmed cases to the DOH. It will coordinate with the Bureau of Quarantine and the Bureau of Customs in conducting active surveillance for cases of MERS-COV.

Philippine National Police (PNP) and the Bureau of Fire Protection (BFP) – The PNP and the BFP will assist in the contact tracing and quarantine of persons or communities. They will also help in securing the transfer of patients to the appropriate health facilities. The security and the

well being of health personnel and responders should be ensured as well as the security of essential needs and supplies, including drugs, vaccines, medical equipment and critical infrastructure such as banks and electricity and water utility services.

In potentially enforcing the Quarantine Act, maintenance of law and order are of utmost concern. By helping preserve vigilance against illness among members of the community, biosecurity and biosafety surveillance will be practiced by law enforcement officials. For this purpose, checkpoints and other means of curtailing the movements of concerned persons, vehicles and animals may be enforced provided that this would apply for a definite and limited duration of time with due regard to the constitutional rights of each individual.

No arrests and detentions shall be enforced except upon lawful processes emanating from the courts or upon order of quarantine of the Secretary of Health in accordance with law for the purpose of preventing the introduction, transmission or spread of MERS-CoV.

Department of National Defense (DND) and Armed Forces of the Philippines (AFP) - The Office of Civil Defense, the National Security Adviser and the National Security Council Secretariat shall assist the Task Force through the coordination of information and the national intelligence community in the task of gathering and evaluating information on threats to national health security such as outbreaks and epidemics of MERS-CoV.,They can guide the Task Force in strategically assessing the threat of the spread of epidemics and the appropriateness of the response. The AFP shall assist the PNP in maintaining peace and order in the event of an epidemic and in the enforcement of a quarantine in affected areas.

Philippine Information Agency (PIA) – As a member of the Presidential Communications Group, the PIA shall conduct information dissemination and help in the health education of the public through mass media. It will help craft messages for the community to aid in the awareness campaign of the Department of Health.

Philippine Health Insurance Corporation (PhilHealth/PHIC) – PhilHealth shall develop various insurance packages for its members depending on the specific MERS-COV to assist them in defraying the cost of hospitalization and other related medical expenses in the event that they contract an MERS-COV.

Guidelines for Preparedness and Response to MERS-CoV

A. Philippine Embassies in the Middle East

In coordination with the Department of Foreign Affairs (DFA), the following guidelines on responding to MERS-CoV have been adopted from DOH technical documents in order to address the growing concern of the spread of MERS-CoV infections among OFWs.

DFA Policy Statement:

The emergence of MERS-CoV since the first part of 2012 in Saudi Arabia, Qatar and Jordan had alerted member states of the World Health Organization to increase their vigilance among their nationals who may have been exposed and infected while living or working in countries in the Middle East.

Objective:

1. Assist Overseas Filipinos in the Middle-east at risk from MERS-CoV
2. Assist in preventing possible spread of MERS-CoV worldwide

Guidelines:

Preparedness:

1. Develop and Implement Communications Plan with the following communication messages:
    a. To emphasize that travel spreads the virus – no travel, no transmission
    b. It is best to stay put and avoid public places to avoid being infected
    c. Provide Health advisories (from WHO,DOH and other experts) on Nature, Symptoms and Causes; and encourage Preventive Measures
    d. Provide Information on Access to Medical Services (to be solicited by Posts from hosts government, NGO, IOs, etc)
    e. Provide convenient Hotline numbers, focal points and useful links for infected Filipinos and other concerned persons
    f. Avoid causing unreasonable panic among the community
    g. Emphasize that is it highly advisable for Overseas Filipinos to stay put and avoid going out unnecessarily in order to minimize the risk of being infected.
    h. Emphasize that the Philippine government does not discriminate against Overseas Filipinos or prevent them from returning to the Philippines.

2. Establish Information Networks and Enhance Linkages to facilitate Efficient, Timely and Real-Time Information Sharing Systems:
    a. Gather useful information on:

i. Condition of Overseas Filipinos at high risk (Filipino doctors, nurses, and workers in the medical field)
ii. Overseas Filipinos that were infected
iii. Foreign or Filipino travellers to Manila who are infected
iv. Extent of spread of the infection
v. Information on host countries' relevant health structures, capacities and frameworks/procedures to respond to pandemic, including available facilities to screen entering, transiting or exiting international travelers

b. Network with Key Sources of Information:
i. Host Governments (particularly public health authorities), WHO, other relevant IOs, NGOs or aid agencies (Red Cross, Red Crescent, etc)
ii. Foreign Embassies and consulates, especially those with migrants similarly situated or with the same profile as migrant Filipinos
iii. Migrant Filipino health professionals (doctors, nurses, etc)
iv. Fellow diplomats
v. Relevant medical contacts (government officials, media practitioner, private health professionals, volunteers, etc)
vi. Traditional and electronic media
vii. Blogs and other social media
viii. Airlines – information on travellers heading to Philippines (flight manifest, seating plan, etc)

3. Implement Protective Measures and Minimize Risk for Foreign Service Personnel to ensure continuity in delivering services assistance to Overseas Filipinos
   a. Train government personnel on preventive measures (vaccinations, proper hygiene, and sanitary procedures, avoiding risky practices, etc)
   b. Provide government personnel with necessary health and safety protective equipment and resources (face masks, disinfectants, etc)

4. Establish Manual/SOPs on how to handle reported infection of an Overseas Filipinos tailored made to specific conditions in each FSPs, particularly to ensure access to medical services for Undocumented Workers

5. Maintain ready pool of doctors, nurses and other relevant health professionals to be deployed as Rapid Response Team or Augmentation Team, where appropriate

6. Revise and Update FSPs ' Individual and Regional Contingency Plans to include potential Pandemic situations

7. Require large-scale employers/companies of OFWs to submit their contingency plans to FSPs.

Response:

a. With due regard to constitutional right to privacy, gather and verify information on possible infected Overseas Filipino.
b. Discreetly contact the infected Overseas Filipino and the Filipinos he may have been in contact with. And, assure through immediate action that the Philippine government is always available to render appropriate assistance
c. Respectfully convince the infected Overseas Filipino to seek or continue getting the appropriate medical services, and to practice self-quarantine as warranted
d. Respectfully advice the Filipinos who may have been in contact with an infected person to get tested, and practice self-quarantine in the meantime that they have not received the appropriate medical clearance. Assist and provide funding support for testing if needed.
e. Coordinate with public health authorities, NGOs, aid agencies, key professionals and available medical service providers to ensure that the Overseas Filipino has access to necessary medical services. Use Philippine government funds where appropriate. [when admitted in a private health facility]
f. Contact and regularly communicate with the infected Overseas Filipino's next of kin in the Philippines to update them of situation and assure them that the Philippine government is rendering appropriate assistance
g. Maintain appropriate confidentiality
h. Exert best efforts to encourage Overseas Filipinos in high risk areas to stay put to prevent them from getting infected (Take into account incubation period, WHO advisory, travel or trade bans, testing procedures, etc)

Pandemic Stage Advisory: DFA Response Levels

Pandemic Stage	**Situation and Criteria**	**DFA Response**
Stage 1 Inter-pandemic period	WHO Phases 1 to 2 – virus circulating in animals, poses a substantial risk to humans and considered a potential pandemic threat No Overseas Filipinos infected	Surveillance: Monitor, assess and report on the situation vis-à-vis Overseas Filipinos, especially those high at risk (e.g. agricultural workers, health and medical professionals, etc) Public diplomacy: Information on preventive measures; Avoid misinformation causing undue panic

Stage 2 Pandemic Alert Period	WHO Phase 3 – the virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. An Overseas Filipino is infected but it appears to be an isolated incident, and probability of transmission to other Filipinos is minimal	Investigate actively if any Filipinos have been infected, and ensure access to medical services Continued public advisory on preventive measures Enact measures to minimize risk to Overseas Filipinos, especially those in the health and medical service sector Minimize risk to foreign service personnel to ensure continuity in delivering assistance to Overseas Filipinos
Stage 3 Pandemic Alert Period	WHO Phase 4 – Sustained human-to-human transmission leading to community-level outbreaks An Overseas Filipino is infected, and there are more Filipinos in the same community at high risk	Travel Advisory: Identify affected community or areas and then advise Filipino public to avoid travelling to those areas Advise affected Filipino community to follow best practices to minimize outbreak: e.g. proper hygiene, avoiding public places or mass gatherings, etc Ensure Filipinos, including undocumented workers, have access to medical services
Stage 4 Pandemic Period	WHO Phases 5 to 6 – Phase 5 – The same identified virus has caused sustained community level outbreaks in two or more countries in one	Implement Official Travel and Trade Restrictions – Deploy Medical RRT/Augmentation for Posts, as necessary Public diplomacy:

	WHO region. Phase 6 – The same virus has caused sustained community level outbreaks in at least one other country in another WHO region. A large number of Overseas Filipinos who are infected	Ensure that the public understands that virus spreads because of movement of people and thus more advisable to stay put and avoid going out to public places Sample Message: The Philippine government values the health and safety of Overseas Filipinos as well as their families in the Philippines. We advise all Filipinos to minimize risk of infection by staying put in their homes and avoid going out to public places unless for extremely urgent reasons.
Post-Peak Pandemic Stage	Levels of pandemic influenza in most countries with adequate surveillance have dropped below peak levels	Maintain Information networks and key contacts Review process to improve response to pandemics in the future

DFA Long-term actions:

1. Foreign Service Posts will maintain and enhance institutional linkages as well as personal networks with public health authorities of the host government, international organizations, NGOs, health professionals, the Filipino community, and other key contacts

2. Build capacities of foreign service personnel to handle potential pandemics and other public health issues, And, ensure continued availability of pool of medical experts who could be immediately deployed as RRT/Augmentation team.

3. Integrate relevant public health data into the OFIS (Overseas Filipinos Information System)

4. Implement sustained public information campaigns on preventive measures and other best practice on health and safety

5. Establish institutional knowledge bank – Refer to Action Plan for previous similar situations such as SARS, as well as compile and

distribute knowledge and experiences of government experts and respnders to similar situations

6. Establish legal framework and formal procedures to improve protection to the health of Overseas Filipinos, including undocumented workers, and mitigate the spread of the pandemic

B. Airplane Flights

International Civil Aviation Authority (ICAO) Policy Statements: (From the Convention on International Civil Aviation)

Article 13: Entry and Clearance Regulations

The laws and regulations of a contracting State as to the admission to or departure from its territory of passengers, crew or cargo of aircraft, such as regulations relating to entry, clearance, immigration, passports, customs, and quarantine shall be complied with by or on behalf of such passengers, crew or cargo upon entrance into or departure from, or while within the territory of that State.

Article 14: Prevention of spread of disease

Each contracting State agrees to take effective measures to prevent the spread by means of air navigation of cholera, typhus (epidemic), smallpox, yellow fever, plague, and such other communicable diseases as the contracting States shall from time to time decide to designate, and to that end contracting States will keep in close consultation with the agencies concerned with international regulations relating to sanitary measures applicable to aircraft. Such consultation shall be without prejudice to the application of any existing inter- national convention on this subject to which the contracting States may be parties.

Objectives:

1. To aid in providing information to passengers on MERS-CoV
2. To detect possible suspect cases on board the flight and institute the appropriate measures to help contain a possible case of infection with MERS-CoV

General Guidelines:

- Information dissemination re: MERS-CoV specifically identfication of symptoms
- Give out copies of the Health Check List to help facilitate the declaration of each passenger's health status and encourage them to report their symptoms
- Practice vigilance for those with fever and respiratory symptoms
- Practice reverse isolation of suspect cases
- Isolation of suspect cases

- Aircraft disinfection and regular inspection of aircraft ventilation and air filtration systems
- Coordination with Quarantine Authorities specifically in providing contact information on passengers who may have been exposed to a suspect or confirmed case of MERS-CoV

Precautions before traveling

People known to have infectious or potentially infectious respiratory infections (i.e. which could spread either by respiratory droplet infection, such as influenza, or airborne transmission, such as TB) should be advised not to travel on commercial aircraft until there is no longer a risk of transmitting infection to others, i.e. until they become non-infectious. If, under exceptional circumstances, travel on a short flight is essential while a person is still infectious, commercial carriers or other public transportation should not be used. Alternative private transportation (e.g. ground ambulance transportation, air ambulance, private carrier) should be considered. If the use of commercial carriers is unavoidable (e.g. transfer to a tertiary care facility), a specific travel protocol should be agreed upon in advance between the public health authorities and airline(s) involved in the countries of departure, arrival and any transit points, and strictly applied. This may include the use of N95 respirator equipment for the reverse isolation of patients.

Symptoms of respiratory infections are not specific (e.g. cough) and cases can often be infectious even before the infection can be diagnosed. Since it is often difficult to assess the condition and fitness to travel of a potentially infected person, passengers with MERS-CoV are more likely to be identified after, rather than at the time of, a flight.

Physicians, both in the Philippines and in other countries, should inform all patients with infectious or potentially infectious that they may pose a risk of infection for others, particularly those with whom they are in close contact for prolonged periods of time. Physicians should advise patients that they must not travel by any public air transportation, or by other public transportation, as long as they are considered infectious or potentially infectious according to the criteria used by the country of origin (i.e. laboratory testing and/or compliance to quarantine and isolation procedures).

Patients being investigated for MERS-CoV should follow the physician's advice on whether to travel or not. ***Physicians should advise suspect cases not to plan to travel until the diagnosis and infectious status have been confirmed. To ensure the health and well-being of the immediate contacts within the family and other travel companions as well as the traveling public, patients would have to adjust or postpone their travel plans until the health authorities of the country of origin provide a medical clearance.***

The physician and/or public health authority must give clear advice or instruction on whether travel may or may not be undertaken. Patients

intending to travel against this advice should be reported to the appropriate public health authority for any necessary action to be taken, potentially together with the airline, in accordance with national legislation.

Precautions during travel

If during a flight a passenger is suspected of having MERS-CoV, either because the case had volunteered the information of his or her medical condition or had been identified by other passengers or flight crew to be experiencing notable respiratory symptoms such as a persistent cough or sneezing or had been found to be weak, febrile and extremely diaphoretic (IATA Passive Passenger Screening for Passenger Agents: http://www.iata.org/whatwedo/safety/health/Documents/passive-passenger-screening-pax-agents.pdf), the cabin crew should try to relocate the passenger in an area without close contact with other passengers if space is available. One cabin-crew member should be assigned to look after the ill passenger, preferably the one who had initially dealt with the patient in order to periodically asses his or her condition and monitor the restrictions in the number of contacts to the patient. The ill passenger should be given a surgical facemask to prevent the spread of infectious droplets. An N95 respirator may be also recommended instead as surgical masks do not prevent the passage of aerosol suspensions of bacteria. In practicing reverse isolation, protective equipment are most effective when worn by the person who is the infectious source.

If no mask/respirator is available or if the patient cannot tolerate wearing such, the passenger should be given instead an adequate supply of paper tissues or paper towels if necessary and instructed to cover the nose and mouth at least when speaking, coughing or sneezing, and to dispose of the tissues appropriately. Proper hygiene, hand washing and hand sanitization should also be borne in mind.

Cabin crew should follow standard universal precautions when handling potentially infectious material (i.e. the wearing of gloves, placing disposables in a biohazard bag (if available) or in a sealed plastic bag). The cabin-crew member designated to look after the possible index case may wear a surgical mask or N95 respirator to protect against inhalation of infectious droplets, especially if the ill person cannot tolerate a mask. (Note: Cabin crew should receive routine training on the use of surgical masks.)

The ICAO standards require the pilot in command to inform the air-traffic control provider that the aircraft may be carrying such a case (Note: WHO-IHR have similar requirements). When advised, the air-traffic controller will transmit a message to the destination airport control tower, for onward transmission to the local public health authority at the place of destination. This timely communication will provide an opportunity for the authority to prepare for arrival of the aircraft, which can include ambulance conduction, the transfer of patients to the appropriate holding or isolation facility and ensuring the use of proper Personal Protective Equipment (PPE) for airport health personnel. It is important that a local procedure to inform the Bureau of Quarantine in the notification of the imminent arrival of the aircraft concerned

should be developed and implemented by airport authorities.

Assistance in Contact Tracing of Suspect Cases among Disembarked Passengers

WHO had asked the International Air Transport Association (IATA) to develop a Passenger Locator Form (PLF) that could be used by airlines in the conduct of contact tracing (see web link below). This was primarily developed in the event that a suspected case of communicable disease is on board a flight or in the routine collection of passenger information during a pandemic in order to help provide the information to health authorities. However, if a potentially contagious passenger has travelled after the flight has landed and the passengers have already dispersed, more information about their post-flight travel itinerary will have to be obtained by the DOH-National Epidemiology Center (refer to section below on guidelines for Preparedness and Response for the Community: Surveillance and Contact Tracing and Appendix C: DOH Interim Guidelines No.2 for Middle East Respiratory Syndrome (MERS-CoV) Contact Tracing**)**.

(IATA Passenger Locator Form:
http://www.iata.org/whatwedo/safety/health/Documents/request-form-passenger-contact-tracing.pdf)

C. Ships

Policy Statements:

International Maritime Organization: The IMO Passenger Ship Safety Initiative

One of the guiding philosophies of the New Internal Regulations adopted by the IMO state: “Passenger ships should be crewed and equipped to ensure the health-safety, medical care and security of persons on board until more specialized assistance is available.”

WHO International Health Regulations 2005: Maritime Declaration of Health

“The master of a ship shall ascertain the state of health on board, and, except when that State Party does not require it, the master shall, on arrival, or in advance of the vessel’s arrival if the vessel is so equipped and the State Party requires such advance delivery, complete and deliver to the competent authority for that port a Maritime Declaration of Health which shall be countersigned by the ship’s surgeon, if one is carried.”

Objectives:

1. To minimize the incidence of MERS-CoV on board passenger and merchant ships

2. To provide information to ships to properly manage cases of MERS-CoV on board
3. To provide specific guidance on the procedure of notification of cases of infectious diseases according to IHR (2005) regulations

Guidelines:

Minimizing the introduction of infectious disease in ships

Travel companies, travel agencies and shipping/maritime companies should provide pre-travel information to customers about the kind of health issues they could encounter while on board the ship. Preventive measures such as delaying travelling, may be provided before the voyage. Information about the importance of not working while ill should also be provided for all crew.

The epidemiological situationof MERS-CoV in the country of the point of origin should be considered when deciding whether pre-embarkation prevention measures should be applied. Even if there are no international travel health advisories that have been issued, the dissemination of a health questionnaire to be completed and signed at embarkation is an option that could be instituted by shipping and maritime companies to assess the health of passengers or crew and identify the presence of suspect cases of MERS-CoV. Passengers, visitors or crew members who have symptoms or have noted “Yes” to questions about any symptoms of a possible infection on the health questionnaire should be assessed, if possible by a medical staff or trained personnel preferably at an assigned area in the terminal itself.

If suspect cases agree to remain isolated in a cabin or holding area in the ship, they may be allowed to go on board. However, the decision is made by the shipping company through its officials. If they pose a risk to other passengers or crew or they may be at risk for developing complications due to their infection, an advice to avoid travelling should be given.

Crew members in the ship or ship personnel who may be in the terminal should be vigilant to observe passengers and other crew members for symptoms similar to those mentioned in the preceding section on Airplane Flights.

While On Board the Ship

Sufficient information should be provided in order to increase the awareness about MERS-CoV of crew members and passengers. Medical staff should be oriented in the assessment and clinical management of cases as well as the appropriate preventive measures, surveillance and reporting requirements of that should be undertaken.

In the event of a diagnosis of a case of MERS-CoV, passengers and crew should be advised of the presence of a case on board and be reminded of the preventive measures to be implemented. It would be crucial that proper guidance be provided on the status of a potential or impending outbreak and the necessary steps to reduce the risk of spread and to minimize the number

of cases.

Surveillance

Surveillance data to be included in the medical log should include, at a minimum: patient age, sex, onset date of symptoms, symptoms, complications (e.g. difficulty of breathing, purple or blue discoloration of the lips, vomiting or signs of dehydration), pre-existing medical conditions (e.g. asthma, diabetes, heart disease or pregnancy), recovery or death, country of residence and/or destination, vaccination and results of diagnostic testing (e.g. rapid viral and bacterial tests, chest x-ray). These data should be reviewed to assess the trends in the frequency of disease and determine the presence and further status of an outbreak.

Subsequently, the ship's master should be informed and regularly updated in order that prevention and control measures be conducted. The sip's master should designate a crew member to:

- review data collected in the medical log;

- identify trends in the number of cases;

- supervise hygiene, preventive and control measures and awareness policy;

- coordinate outbreak management.

Active surveillance or case finding among passengers and crew should be initiated by the ship's medical staff in order to detect possible new cases of MERS-CoV. The appropriate personnel should directly contact passengers and crew in a health survey and findings should be discussed with the ship's master.

The presence of diagnostic testing, quarantine facilities and ambulance transport and conduction arrangements can be ascertained beforehand with the quarantine authorities at the next port of call of point of destination. In the meantime, proper isolation and quarantine procedures have to be observed by the ship's crew. Members of the crew, including the medical staff, should be required to undergo fever monitoring and regularly update the ship's master (or the first mate or any designated ship officer if the ship's master or other ship officials are incapacitated) about the health status of the crew.

Limiting the number of people who come in contact with isolated patients is crucial. Supportive treatment can be provided by the medical personnel but due diligence should be given to infection control procedures while managing suspect cases who should be isolated in their cabins or the appropriate holding areas. Surgical masks or N95 respirators should be provided to patients to limit the risk of spread of respiratory droplet or potential airborne infection.

Crew involved in the care of cases of MERS-CoV, including those involved in

housekeeping and food and beverage crew, should not be in an at-risk group (i.e. elderly, pregnant women or those with underlying medical conditions).

In spite of the prevention and control measures that have been undertaken, if an outbreak of MERS-CoV ensues, people should be encouraged to avoid hand shaking and practice social distancing (refer to the section below on Social Distancing).

Maritime Declaration of Health

According to IHR 2005:

"The master of a ship, or the ship's surgeon if one is carried, shall supply any information required by the competent authority as to health conditions on board during an international voyage.

A Maritime Declaration of Health shall conform to the model provided in Annex 8 [of the IHR 2005 document].

A State Party may decide:

(a) to dispense with the submission of the Maritime Declaration of Health by all arriving ships; or

(b) to require the submission of the Maritime Declaration of Health under a recommendation concerning ships arriving from affected areas or to require it from ships which might otherwise carry infection or contamination."

The template or model of the Maritime Declaration of Health is in **Annex A: Model of Maritime Declaration of Health.**

D. Points of Entry

BOQ Policy Statements:

The Bureau of Quarantine shall institute rules and regulations governing the measures for the control of the introduction and spread of public health emergencies of international concern at the port and airport of entry.

In the event of an outbreak of public health emergency of international concern in a community, the Director of the Bureau shall recommend to the Secretary of Health the following measures for the prevention of transmission and spread of such public health emergency in coordination with Department of Health agencies (HEMS, NCDPC, NEC, NCHFD, CHDs) and other concerned government agencies ((NDCC, DILG):

Apprehension, detention/isolation or surveillance of suspect/ cases.

Place under active or passive surveillance, individuals who have been exposed to the infection considered as dangerous contact.

To declare an area or community “under quarantine” where the public health emergency occurs.

Objectives:

1. Maximum security against the introduction and spread of infectious diseases, to include emerging diseases and public health emergencies of international
   concern (PHEIC)
2. Develops protocols and field operation guidelines on (Points of Entry-POE: international ports and airports) entry-exit management
3. Conducts international health surveillance at POE
4. Monitors public health threats from foreign countries/from country of origin
5. Provides technical inputs for alert level system and training design
6. Ensures effective coordination with airlines and shipping companies, security and other networking, communication and coordination with various stakeholders

Guidelines

PREPAREDNESS:

1. Preparation of case definition of the public health emergencies of international concern (PHEIC) for dissemination to all Quarantine Medical Officers (QMOs), quarantine stations, port and airport authorities, airline authorities, government and other concerned agencies
2. Effective communication system for rapid notification and information between the Bureau of Quarantine with port/airport authorities, shipping/airline companies, security and other government agencies (custom, Immigration, Department of Agriculture, etc.)
3. Preparation of protocol for the management of inbound and outbound travelers
4. Preparation of guidelines on the handling of suspects/cases while on board aircraft or vessel
5. Dissemination of case definition and identification of infectious disease outbreak to all Quarantine Medical Officers at all quarantine stations nationwide
6. Preparation of Health Check List (HCL) for arriving aircraft/vessel’s crew and passengers **(Appendix B: Health Declaration Checklist)**
7. Preparation of List of High index of suspicion for the crew of airline and vessel
8. Preparation of Alert Levels / Health Alert Notice (HAN) in the entry-exit management
9. Preparation of Logistic requirement for human resource development and management, equipment and supplies

10. Effective coordination and collaboration between the Bureau of Quarantine and various concerned government and NGOs, both national and international

RESPONSE:

1. Implementation of the international health surveillance/tailored-action plans at POE, its area of responsibility and its environs
2. Screening of all incoming passengers and crew coming from MERS CoV affected countries
3. Coordinate with airline companies and shipping lines in filling out of Health Check List/ Declaration and submission to the Bureau of Quarantine at POEs
4. Thermal screening (body temperature check) through an infrared thermal camera
5. Obtain history of travelers and contact/exposure of passenger
6. Clinical evaluation of suspect cases at the triage/ holding area
7. Activation of referral system of suspect cases to dedicated hospital/s for laboratory confirmation, isolation and quarantine
8. Surveillance by the Bureau of Quarantine:
    a. 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 for contact tracing and national surveillance.
    b. BOQ shall provide RESU the passenger manifest and other relevant information in situations where contact tracing is necessary.
9. Collection, collation, reporting and documentation for dissemination to concerned DOH services, agencies (OSEC, NEC,HEMS, NCDPD, NAIA, etc.)
10. Effective networking with the port and airport authorities, airline and shipping companies, CIQS, and other government agencies and NGOs (WHO)

E. Community: Surveillance and Contact Tracing

Surveillance
(Refer to **Appendix C: DOH Interim Guidelines No.1 for Enhanced Surveillance on MERS-CoV**)

NEC Policy Statements:
This set of guidelines is issued as reference for all participating health agencies, DOH Central Offices, Regional Centers for Health Development, Research Institute for 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 MERS-CoV:

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.

Objectives:

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

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 ILUSARI 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 hospital 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.

Contact Tracing
(Refer to **Appendix D: DOH Interim Guidelines No.2 for Middle East Respiratory Syndrome (MERS-CoV) Contact Tracing**)

NEC Policy Statements
Interim guidelines are provided to declare the values, indications, procedures and limitations of contact tracing with regard the Middle East respiratory syndrome coronavirus (MERS-CoV) infection in the country:

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 logics 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.

Objectives:
1. Contact identification

2. Management of contacts
3. Initiation and termination of contact tracing

Guidelines

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*

(* 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.)

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 D: DOH Interim Guidelines No.2 for Middle East Respiratory Syndrome (MERS-CoV) Contact Tracing).** 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.

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**.**

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.

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)**.**

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 **(3rd** 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.

F. Hospital/Health Facility

Policy Statements:
DOH has provided initial guidance in classifying patients based on their risk for exposure and possible status of infection. Case definitions help define the

appropriate measures to undertake both for the protection and safety of the patient and his or her contacts.

WHO developed an interim guidance to meet the urgent need for up-to-date information and evidence-based recommendations for the safe care of patients with probable or confirmed novel coronavirus (nCoV) infection (i.e. MERS-CoV). The interim recommendations are informed by evidence-based guidelines WHO has published, including the Infection prevention and control of epidemic- and pandemic-prone acute respiratory diseases in health care.

Objective:
These interim guidelines are recommendations that reflect current understanding of MERS-CoV related to infection prevention and control (IPC) using interim case definitions. The guidance is intended for health care professionals and health care workers.

It contains guidelines for the following:

1. Management of Outpatients in Health Facilities
2. Management of Hospital in-patients

Guidelines

Currently, there are no specific treatments recommended for illnesses caused by MERS-CoV. Medical care is supportive and to help relieve symptoms. Potential therapeutic interventions are now being investigated and will be shared once evidence of their efficacy are made available.

The following management guidelines focus on the surveillance and reporting of MERS-CoV in the health facilities and infection prevention and control precautions.

Management of Outpatients in Health Facilities

Case Definitions (based on DOH Interim Guidelines No. 1 and 2 for MERS-CoV c/o NEC)

Patient Under Investigation

- A person with sudden onset of fever 38°C , 100.4°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)

(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)

Suspect Case

- A person with sudden onset of fever (?. 38°C , 100.4°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.

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

Assessment of Suspect Cases for Laboratory Testing:

- 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.

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.

Reporting, Home Care and Referral for Admission

Reporting
(Refer to **Appendix C: DOH Interim Guidelines No.1 for Enhanced Surveillance on MERS-CoV**)

1. The notification and reporting of immediately notifiable diseases, syndromes and events shall follow the Flow of Notification and Reporting of Immediately Notifiable Diseases, Syndromes and Events (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: Flow of Weekly Reporting of Notifiable Diseses)
3. Reporting of cases of MERS-CoV shall follow the flow described (Annex B).

Home Care vs. Admission in a Health Facility

As knowledge of the disease and transmission of MERS–CoV is continuously updated, it would be prudent to admit confirmed, probable and symptomatic cases of the MERS-CoV infection in the appropriate health facilities to ensure the safety of the public and the adequacy and quality of health care provided to the patients. However, for justifiable reasons, either when inpatient care is unavailable or unsafe, or cases of informed refusal of hospitalization, options for health care provision outside the health facility may need to be considered.

Based on an assessment of the local circumstances and resource availability, symptomatic contacts with milder symptoms and without underlying conditions that may put the patient at increased risk of developing complications, may be cared for in the home environment. Likewise, home care may also be applied to symptomatic patients not requiring or no longer requiring hospitalization. This decision requires an appropriate assessment by the medical authorities to consider as well the safety of the patient's home environment. If symptomatic contacts or cases with milder symptoms are cared for at home, infection control measures should be used.

The following guidelines are provided by WHO for home-based infection prevention and control measures for MERS-CoV:

1. Limit contact with the ill person as much as possible. The household members should stay in a different room or, if that is not possible, maintain a distance of at least one meter from the ill person (e.g. sleep in a separate bed).
2. Ensure that anyone who is at increased risk of severe disease does not care for the ill person or come into close contact with the ill person. The current groups considered at increased risk for the MERS-CoV infection include those with chronic heart, lung or kidney conditions; diabetes; immunosuppression; blood disease; and older adults. If contact with the ill person cannot be avoided by those with an increased risk of severe disease, alternative housing should be considered.

3. Perform hand hygiene following all contact with the ill person or his/her immediate environment. Hand hygiene should also be performed before and after preparing food, before eating, after using the toilet, and whenever hands look dirty. Perform hand hygiene using soap and water. If hands are not visibly soiled, alcohol-based hand rub can be used. Assistance for the ill person to perform regular hand hygiene may be provided as needed. Paper towels to dry hands are desirable; if they are not available, use dedicated cloth towels and replace them when they become wet.
4. Respiratory hygiene should be practiced by all, especially the ill person. Respiratory hygiene refers to covering the mouth and nose during coughing or sneezing using medical masks, cloth masks, tissues or flexed elbow, followed by hand hygiene.
5. Discard materials used to cover the mouth or nose, or clean them appropriately after use (e.g. wash handkerchiefs using regular soap or detergent and water).
6. The caregiver should wear a medical mask fitted tightly to the face when in the same room with the ill person. Masks should not be touched or handled during use. If the mask gets wet or dirty with secretions, it must be changed immediately. Discard the mask after use and perform hand hygiene after removal of the mask.
7. Ensure that shared spaces (e.g. kitchen, bathroom) and the ill person's room are well ventilated (e.g. keep windows open).
8. Avoid direct contact with body fluids, particularly oral or respiratory secretions and stool. Use disposable gloves to provide oral or respiratory care and when handling stool and urine, if possible. Perform hand hygiene after removing gloves.
9. Gloves, tissues, masks, and other waste generated by the ill person or in the care of the ill person should be bagged (placed in a lined container in the ill person's room) before disposal with other household waste.
10. Avoid other types of exposure to the ill person or contaminated items in the immediate environment of the ill person; for example, avoid sharing eating utensils, drinks, towels, washcloths or bed linen. Eating utensils and dishes should be cleaned with soap and water after use.
11. Clean frequently touched surfaces such as bedside tables, bedframe, and other bedroom furniture daily with regular household cleaners or a diluted bleach solution (1 part bleach to 99 parts water).
12. Clean bathroom and toilet surfaces daily with regular household cleaners or a diluted bleach9 solution (1 part bleach to 9 parts water).
13. Clothes, bedclothes, bath and hand towels, etc., of the ill person can be cleaned using regular laundry soap and water, and dried thoroughly. Place contaminated linen into a laundry bag. Soiled laundry should not be shaken and direct contact of the skin and clothes with the contaminated materials from the ill person should be avoided.
14. Consider use of disposable gloves and protective clothing (e.g. plastic aprons) when cleaning or handling surfaces, clothing or linen soiled with body fluids. Hand hygiene should be performed after glove removal.
15. The symptomatic person should remain at home until satisfactory

resolution of the symptoms. The decision to remove the ill person from home observation should be made based on either clinical or laboratory findings or both.

16. All household members should be considered contacts and their health should be monitored as described previously.

Referral for Admission

As was previously noted, because of a possible rapid progression to acute respiratory distress syndrome (ARDS) and other severe life-threatening complications, even otherwise healthy, symptomatic contacts or probable cases should be considered for admission for close observation in a health facility.

Based on WHO guidelines, coordination with a health facility and/or health care provider should be done during the observation period. Medical personnel should be involved in reviewing the current health status of the contacts by phone and, ideally, by scheduled visits on a regular (e.g. daily) basis, performing specific diagnostic tests as necessary.

Doctors and other health care professionals should give advance instructions on where to seek care when a contact becomes ill, what should be the most appropriate mode of transportation, when and where to enter the designated health care facility, and what infection control precautions should be followed.

The receiving medical facility should be notified that a symptomatic contact will be coming to their facility. While traveling to seek care, the ill individual should wear a medical mask if available and tolerated. Public transportation to the health care facility should be avoided, if possible.

If the ill contact is transported with a private vehicle, open the windows of the vehicle if possible. The ill contact should be advised to perform respiratory hygiene and stand or sit as far away from others as possible (at least 1 m), when in transit and when in the health care facility. Appropriate hand hygiene should be employed by the ill contact and caregivers. Any surfaces that become soiled with respiratory secretions or body fluids during transport should be cleaned with regular household cleaners or a diluted bleach solution, whichever is most appropriate.

Management of In-patients:

In order to prevent and control infection when tending to probable or confirmed cases, the following are based on WHO guidelines:

1. Standard Precautions include:
    a. hand hygiene and use of PPE to avoid direct contact with patients' blood, body fluids, secretions (including respiratory secretions) and non-intact skin;

i. Hand hygiene includes either washing hands with soap and water or the use of an alcohol-based hand rub
ii. Wash hands with soap and water when they are visibly soiled.
iii. The use of PPE does not eliminate the need for hand hygiene. Hand hygiene may also be necessary while putting on and especially when taking off PPE.

b. prevention of needle-stick or sharps injury
c. safe waste management; cleaning, disinfection and, where applicable, sterilization of patient-care equipment and linen, and cleaning and disinfection of the environment:
    i. Ensure that cleaning and disinfection procedures are followed consistently and correctly.
    ii. Cleaning environmental surfaces with water and detergent and applying commonly used disinfectants (such as hypochlorite) is an effective and sufficient procedure.
    iii. Manage laundry, food service utensils and medical waste in accordance with routine procedures.
d. Use of respiratory hygiene in anyone with respiratory symptoms should be encouraged.
e. The use of PPE should be guided by a risk assessment concerning anticipated contact with blood, body fluids, secretions and non-intact skin for routine patient care. When procedures include a risk of splash to the face and/or body, PPE should include the use of:
    i. facial protection by means of either a medical mask14 and eye-visor or goggles, or a face shield; and,
    ii. a gown and clean gloves.

2. Additional precautions when caring for patients with severe acute respiratory illness (SARI):

All individuals, including visitors and HCWs, in contact with patients with ARI should:

a. wear a medical mask when in close contact (i.e. within approximately 1 m) and upon entering the room or cubicle of the patient;
b. perform hand hygiene before and after contact with the patient and his or her surroundings and immediately after removal of a medical mask.

3. Additional precautions when performing aerosol-generating procedures:

a. wear a particulate respirator - when putting on a disposable particulate respirator, always check the seal;
b. wear eye protection (i.e. goggles or a face shield);
c. wear a clean, non-sterile, long-sleeved gown and gloves (some of these procedures require sterile gloves);
d. wear an impermeable apron for some procedures with expected high fluid volumes that might penetrate the gown;

e. perform procedures in an adequately ventilated room; i.e. minimum of 6 to 12 air changes per hour in facilities with a mechanically ventilated room and at least 60 liters/second/patient in facilities with natural ventilation;
f. limit the number of persons present in the room to the absolute minimum required for the patient's care and support;
g. perform hand hygiene before and after contact with the patient and his or her surroundings and after PPE removal.

4. Infection prevention and control precautions when caring for patients with probable or confirmed MERS-CoV infection:

a. Limit the number of HCWs, family members and visitors in contact with a patient with probable or confirmed MERS-CoV infection.
b. To the extent possible, assign probable or confirmed cases to be cared for exclusively by a group of skilled HCWs both for continuity of care and to reduce opportunities for inadvertent infection control breaches that could result in unprotected exposure.
c. Family members and visitors in contact with a patient should be limited to those essential for patient support and should be trained on the risk of transmission and on the use of the same infection control precautions as HCWs who are providing routine care. Further training may be needed in settings where hospitalized patients are often cared for by family members.

In addition to Standard Precautions, all individuals, including visitors and HCWs, when in close contact (within 1 m) or upon entering the room or cubicle of patients with probable or confirmed MERS-CoV infection should always:

a. wear a medical mask;
b. wear eye protection (i.e. goggles or a face shield);
c. wear a clean, non-sterile, long-sleeved gown; and gloves (some procedures may require sterile gloves);
d. perform hand hygiene before and after contact with the patient and his or her surroundings and immediately after removal of PPE.

If possible, use either disposable equipment or dedicated equipment (e.g. stethoscopes, blood pressure cuffs and thermometers). If equipment needs to be shared among patients, clean and disinfect it between each patient use. HCWs should refrain from touching their eyes, nose or mouth with potentially contaminated gloved or ungloved hands.

Place patients with probable or confirmed MERS-CoV infection in adequately ventilated single rooms or Airborne Precaution rooms; if possible, situate the rooms used for isolation (i.e. single rooms) in an area that is clearly segregated from other patient-care areas. When single rooms are not available, put patients with the same diagnosis together. If this is not possible, place patient beds at least 1 m apart.

In addition, for patients with probable or confirmed MERS-CoV infection:

a. Avoid the movement and transport of patients out of the isolation room or area unless medically necessary. The use of designated portable X-ray equipment and other important diagnostic equipment may make this easier. If transport is required, use routes of transport that minimize exposures of staff, other patients and visitors.
b. Notify the receiving area of the patient's diagnosis and necessary precautions as soon as possible before the patient's arrival.
c. Clean and disinfect patient-contact surfaces (e.g. bed) after use.
d. Ensure that HCWs who are transporting patients wear appropriate PPE and perform hand hygiene afterwards. In low-resource countries, not all suspected MERS- CoV patients will be admitted to health-care facilities. They may prefer to stay in their homes to avoid the extra cost to their families of transportation and of living away from home. WHO publications are available for patient care at home and in the community.

5. Duration of isolation precautions for MERS-CoV infection:

The duration of infectivity for MERS-CoV infection is unknown. While Standard Precautions should continue to be applied always, additional isolation precautions should be used during the duration of symptomatic illness and continued for 24 hours after the resolution of symptoms.

Given that little information is currently available on viral shedding and the potential for transmission of MERS-CoV, testing for viral shedding should assist the decision making when readily available.

Patient information (e.g. age, immune status and medication) should also be considered in situations where there is concern that a patient may be shedding the virus for a prolonged period.

6. Collection and handling of laboratory specimens

All specimens should be regarded as potentially infectious, and HCWs who collect or transport clinical specimens should adhere rigorously to Standard Precautions to minimize the possibility of exposure to pathogens:

a. Ensure that HCWs who collect specimens wear appropriate PPE.
b. Ensure that personnel who transport specimens are trained in safe handling practices and spill decontamination procedures.
c. Place specimens for transport in leak-proof specimen bags (secondary container) that have a separate sealable pocket for the specimen (i.e. a plastic biohazard specimen bag), with the patient's label on the specimen container (primary container), and a clearly written request form.
d. Ensure that health-care facility laboratories adhere to appropriate biosafety practices and transport requirements according to the type of organism being handled.
e. Deliver all specimens by hand whenever possible. Do not use pneumatic-tube systems to transport specimens.

f. State the name of the (suspected) ARI of potential concern clearly on the accompanying request form. Notify the laboratory as soon as possible that the specimen is being transported.

G. Laboratory

RITM Policy Statements:
The Research Institute for Tropical Medicine of the Department of Health (RITM-DOH), the country's National Reference Center for Emerging and Re-emerging Infectious Diseases, is geared with rapid detection methods, fully equipped laboratory and hospital facilities and trained personnel in responding to the threat of new infectious disease agents. DOH has instructed RITM to be on alert for possible detection and management of MERS-CoV cases in the country.

Objective:

1. Provide diagnostic services primarily using molecular detection methods to ensure sensitive and rapid diagnosis
2. Provide access to a global network of laboratories which provide mutual support in the confirmation and further characterization of new infectious agents

Guidelines:

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.

Laboratory testing follows the following procedures:

DIAGNOSIS OF MIDDLE-EAST RESPIRATORY SYDROME CORONA VIRUS (MERS Co-V)

CASE DEFINITIONS as of June 10, 2013

SUSPECT CASE:

CLINICAL CRITERIA:

A person presenting with

1. Acute Respiratory infection, which may include fever (≥ 38°C)[A] AND cough; **AND**
2. Suspicion of pulmonary parenchymal disease (i.e. Pneumonia or Acute Respiratory Distress Syndrome based on clinical or radiological[B] evidence of consolidation); **AND**
3. History of travel from the Arabian Peninsula or neighboring countries[C] within 14 days; **AND**
4. With symptoms not explained by any other infection or any other etiology including all clinically indicated tests for community acquired pneumonia[D] according to local management guidelines

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

1. Persons who develop severe acute lower respiratory illness ok known etiology within 14 days after travel from the Arabian Peninsula or neighboring countries[C] but do not respond to appropriate therapy; **OR**
2. Persons who develop severe acute lower respiratory illness who are close contacts[E] of a symptomatic traveller who developed fever and acute respiratory illness within 14 days after travel from the Arabian Peninsula or neighboring countries[C].

PROBABLE CASE:

1. A person fitting the definition of a suspect case with clinical, radiological, and histopathological evidence of pulmonary parenchyma disease (i.e Pneumonia or ARDS) but no possibilility of laboratory confirmation either because the patient or samples are not available or there is no testing available for other respiratory infection, **AND**
2. Close contact with laboratory confirmed case, **AND**
3. Not already explained by any other infection or etiology, including all clinically indicated tests for community acquired pneumonia according to local management guidelines

OR

4. Any person with severe acute respiratory illness with no known etiology **AND** an epidemiologic link to a confirmed MERS case

CONFIRMED CASE

A person with laboratory confirmation[F] of infection with MERS Co-V.

A. **FEVER** is oral and digital ear temperature >38°C. Use clinical judgement when evaluating patients for whom a measured temperature of >38°C is not documented. Factors that should be considered include patients' self-report of fever, use of antipyretics, and presence of Immunocompromised conditions or intake of immunosuppressants, elderly, and lack of access to health care or inability to obtain a measured temperature. Consider these factors when classifying patients who do not meet the criteria for MERS CoV suspect.

B. **RADIOGRAPHIC APPEARANCE** of MERS CoV cases include predominantly peripheral lesions, commonly progressing from unilateral focal air-space opacity to unilateral multifocal or bilateral involvement during treatment.

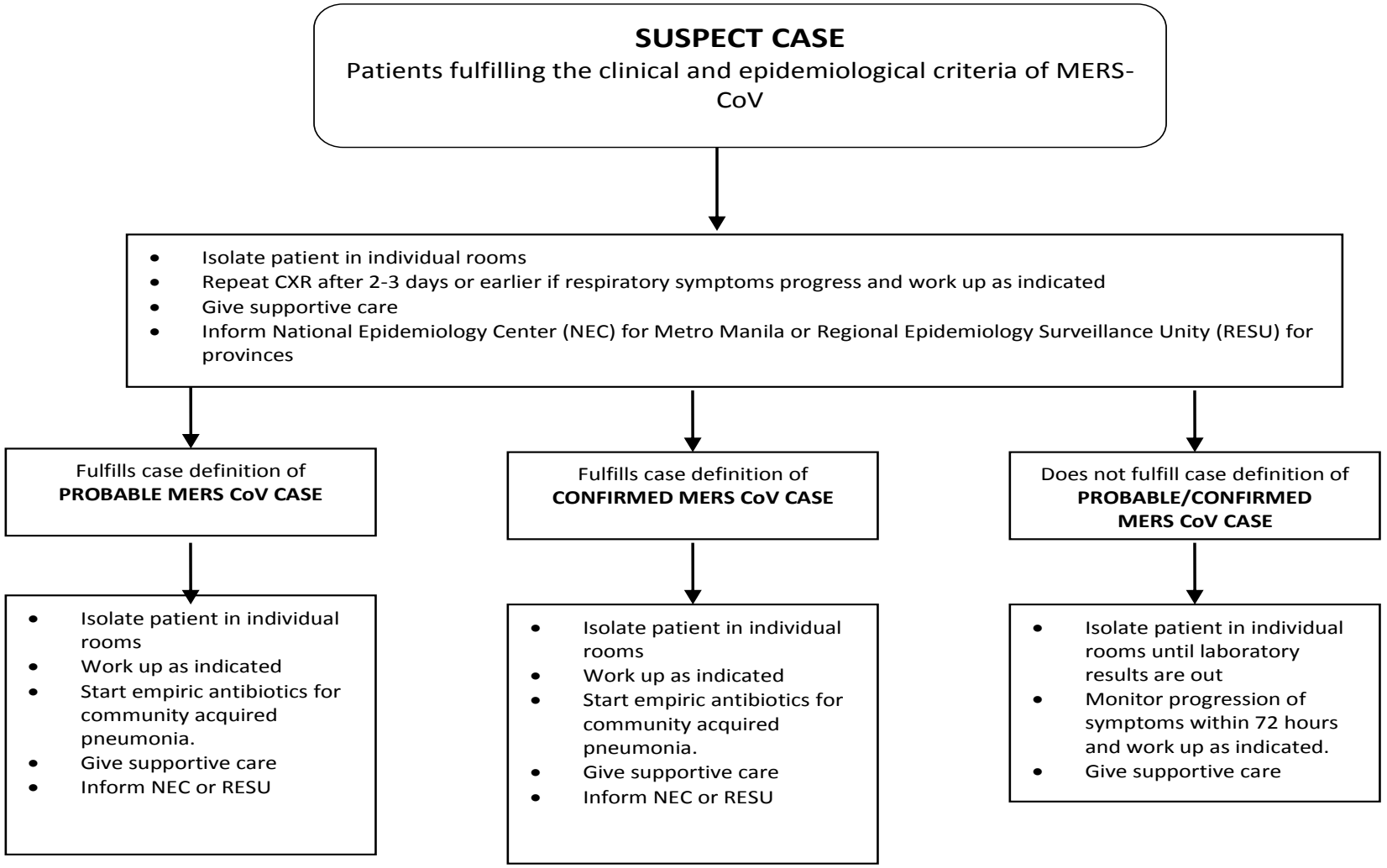
C. **COUNTRIES** considered in the Arabian Peninsula and neighboring include: Bahrain, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian territories, Qatar, Saudi Arabia, Syria, the United Arab Emirates (UAE), and Yemen

D. Examples of **respiratory pathogens** causing community acquired pneumonia include Influenza A and B, respiratory syncytial virus, Streptococcus pneumonia, and Legionella pneumophila.

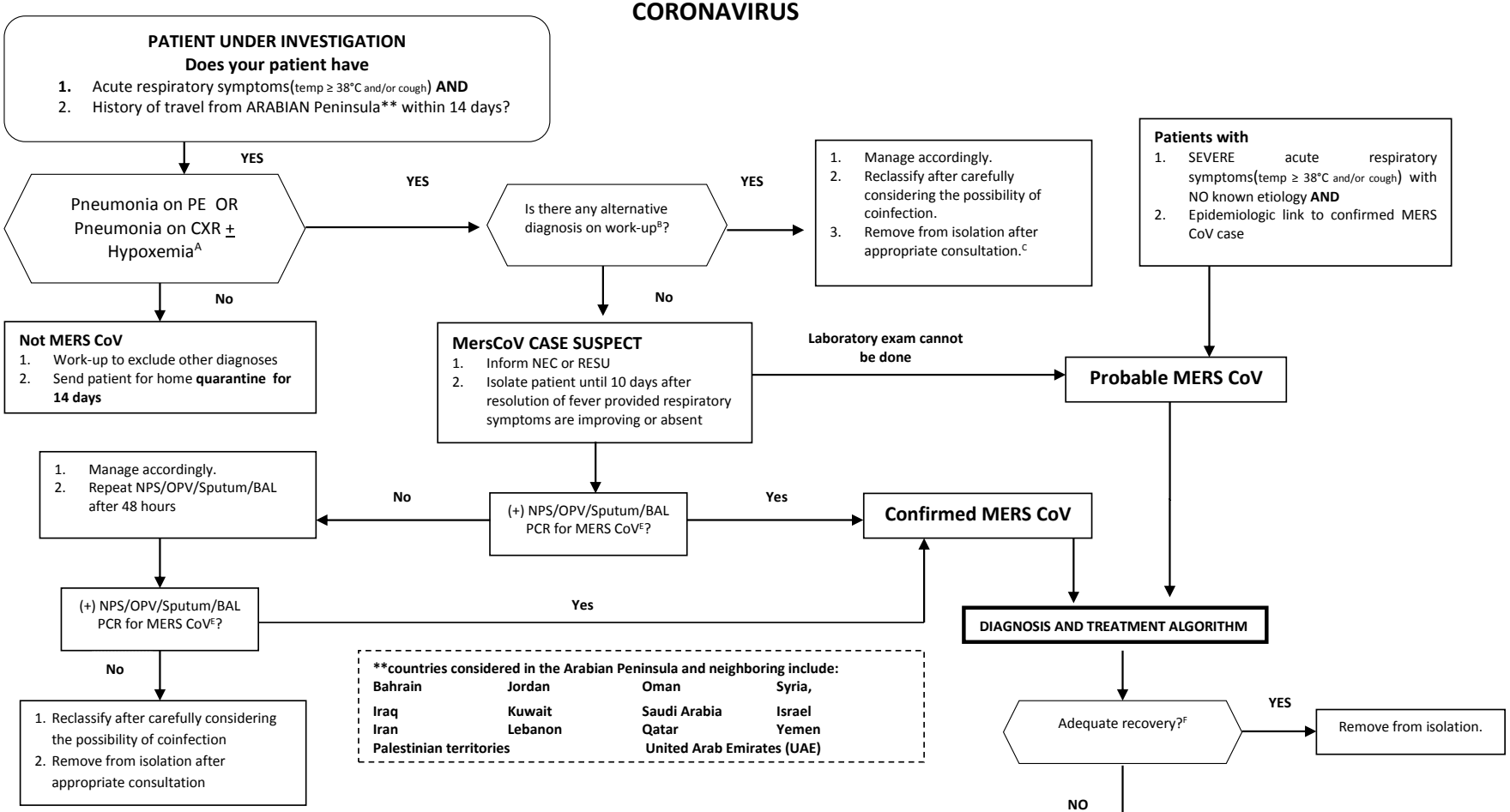
E. **CLOSE CONTACT** is defined as providing care for the ill traveller (eg, a healthcare worker or family member), or having similar close physical contact; or stayed at the same place (i.e lived with, visited) as the traveller while the traveller was ill.

F. **LABORATORY CONFIRMATION** c/o RITM Virology

GENERAL MANAGEMENT PROCEDURE FOR SYMPTOMATIC PATIENTS WITH EXPOSURE HISTORY TO MIDDLE EAST RESPIRATORY SYNDROME CORONA VIRUS



GENERAL MANAGEMENT OF PATIENTS UNDER INVESTIGATION FOR SEVERE RESPIRATORY DISEASE ASSOCIATED WITH MERS CORONAVIRUS



A. Hypoxemia is <95% O2 saturation on pulse oximetry taken at room air

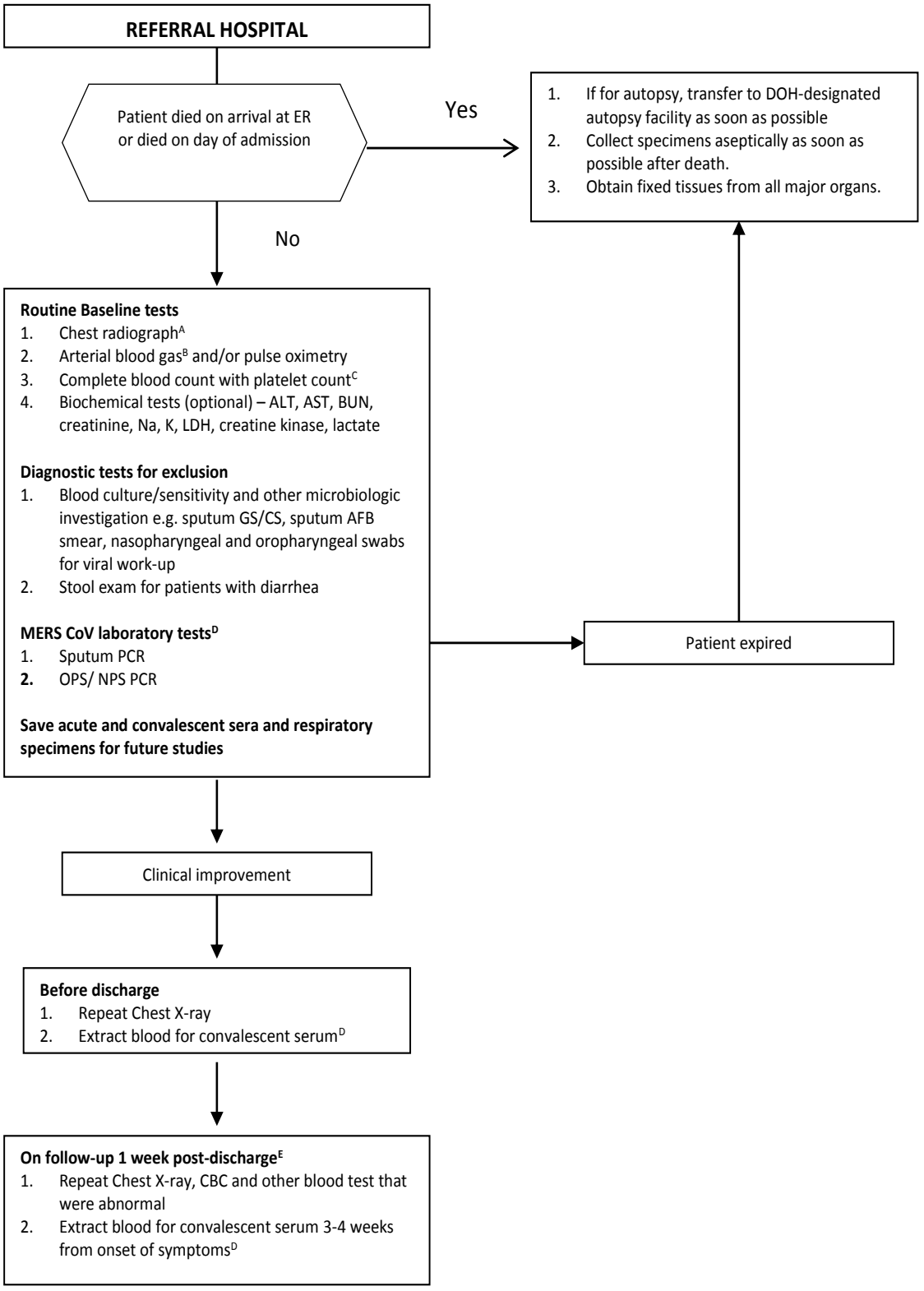
B. Factors that may be considered in assigning diagnosis include the strength of the exposure history, the specificity of the diagnostic test and the compatibility of the clinical presentation and course of illness for the alternative diagnosis. Work ups may include sputum GS/CS for CAP, sputum AFB, urine legionella antigen, rapid PCR, DFA, serology, NPS/OPS for H1N1, H7N9.

C. Patients initially classified as suspect or probable MersCoV, for whom an alternative diagnosis can fully explain the illness, reclassify them after carefully considering the possibility of coinfection. They may be removed from isolation after appropriate consultation with the clinician and public health authorities. Factors that may be considered include the nature of the potential exposure to MersCoV, nature of contact with other in the residential or work setting and the strength of the evidence for an alternative diagnosis.

D. Supportive care includes antipyretics, adequate hydration, and oxygenation

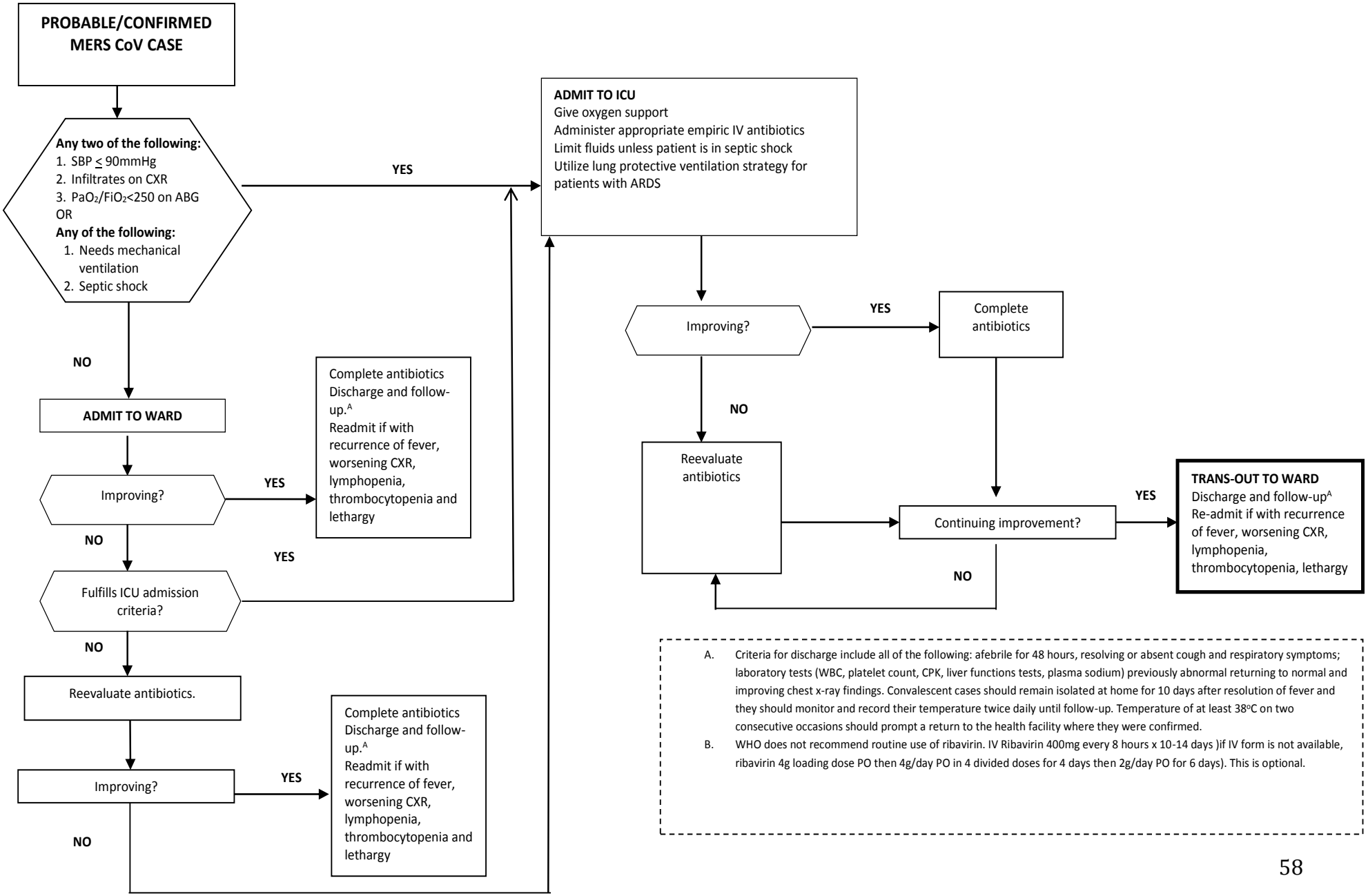
E. Adequate sample is assumed. In the event that sputum cannot be given an oropharyngeal swab may be submitted for analysis

DIAGNOSTIC EVALUATION OF SYMPTOMATIC PATIENTS UNDER INVESTIGATION FOR SEVERE RESPIRATORY DISEASE ASSOCIATED WITH MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS



A. If initial chest x-ray is normal, repeat after 2-3 days or as indicated, i.e. if oxygen saturation <95%
B. Repeat ABG if oxygen saturation fails below 95%
C. Repeat CBC on Day 3 or as indicated
D. Send specimen to RITM Virology
E. Subsequent follow-ups are recommended until the chest x-ray and patient's health return to normal based on the clinician's assessment.

TREATMENT OF SEVERE RESPIRATORY DISEASE ASSOCIATED WITH MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS



A. Criteria for discharge include all of the following: afebrile for 48 hours, resolving or absent cough and respiratory symptoms; laboratory tests (WBC, platelet count, CPK, liver functions tests, plasma sodium) previously abnormal returning to normal and improving chest x-ray findings. Convalescent cases should remain isolated at home for 10 days after resolution of fever and they should monitor and record their temperature twice daily until follow-up. Temperature of at least 38°C on two consecutive occasions should prompt a return to the health facility where they were confirmed.

B. WHO does not recommend routine use of ribavirin. IV Ribavirin 400mg every 8 hours x 10-14 days)if IV form is not available, ribavirin 4g loading dose PO then 4g/day PO in 4 divided doses for 4 days then 2g/day PO for 6 days). This is optional.

Depending on the exposure history and the current symptoms, the following table will guide the health worker in deciding the course of action to undertake:

Disposition of Patients Consulting for MERS CoV

A. With exposure to confirmed case of MERS-CoV

History of Travel to affected country	Fever	Respiratory Sx/Pneumonia	Management in Hospital
+	+	+	Consider **MERS**, send sputum for PCR and admit
+	+	-	Consider as **CUO**, send sputum and admit
+	-	+	Consider as **CUO**, send sputum and admit
+	-	-	Home quarantine within 14 days from exposure Advise
-	+	+	Consider **MERS**, send sputum for PCR and admit
-	-	-	Home quarantine within 14 days from exposure Advise

B. Without exposure to confirmed case of MERS CoV

History of Travel to affected country	Fever	Respiratory Sx/Pneumonia	Management in Hospital
+	+	+	Consider **MERS**, send sputum for PCR and admit
+	+	-	Consider as **CUO**, work up, send home on home quarantine within 14 days from exposure
+	-	+	Consider **MERS**, send sputum for PCR and admit
+	-	-	Asymptomatic Send home with advise
-	+	+	ILI, Not MERS Symptomatic Treatment
-	+	-	Not MERS Symptomatic Treatment
-	-	+	Not MERS Symptomatic Treatment

H. Public Places and Social Distancing

DOH Policy Statements
Before a vaccine to MERS-CoV may be developed, social distancing measures can be utilized as a strategy for disease containment in the event of an extensive epidemic. It aims to decrease the likelihood of transmission of respiratory infections by limiting the duration and frequency of contact between infected and susceptible individuals. Called non-pharmaceutical interventions, these measures may include closure of schools or workplaces, postponement or cancellation of mass gatherings, travel restrictions, encouraging the limitation of contacts within the community and enforcing a tight control between borders where quarantine may be enforced on one or both sides. These public health measures are an integral part of the pandemic response plans of the WHO and the U.S. Centers for Disease Control and Prevention (CDC).

Objective:
1. To provide guidance on the appropriate health behaviors to adopt during an epidemic
2. To work with local government units, health authorities and law enforcement agencies in coordinating the timing and scope of the appropriate social distancing measures to be implemented

Guidelines

Risk Communication Messages

In risk communication, the primary communication objective is to provide status updates of the MERS-CoV situation in the Philippines and in affected countries where OFWs are. This includes an assessment of the adequacy of ongoing strategies taken by the government in the prevention and control of MERS-CoV.

The subsequent communication objective is equally important as guidance should be given to the public on how to respond. This entails adopting the appropriate health behaviors, awareness of symptoms and assessing the risk of infection and possible transmission in the family and in the community and knowledge of possible options of the health facilities to go to in order to consult or to undergo laboratory testing.

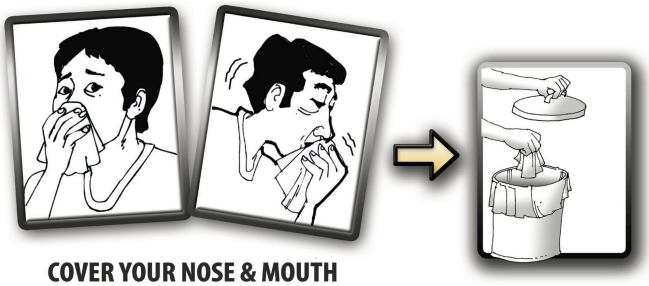
Respiratory Hygiene/Cough Etiquette

Covering your cough
- When coughing or sneezing, use a tissue to cover your nose and mouth
- Dispose of the tissue afterwards
- Wear a surgical mask, if possible

Wash your hands
- After coughing, sneezing or blowing your nose, wash your hands with soap and water
- Use alcohol-based liquids, gels or wipes if you do not have access to soap and water

How to prevent MERS-CoV?

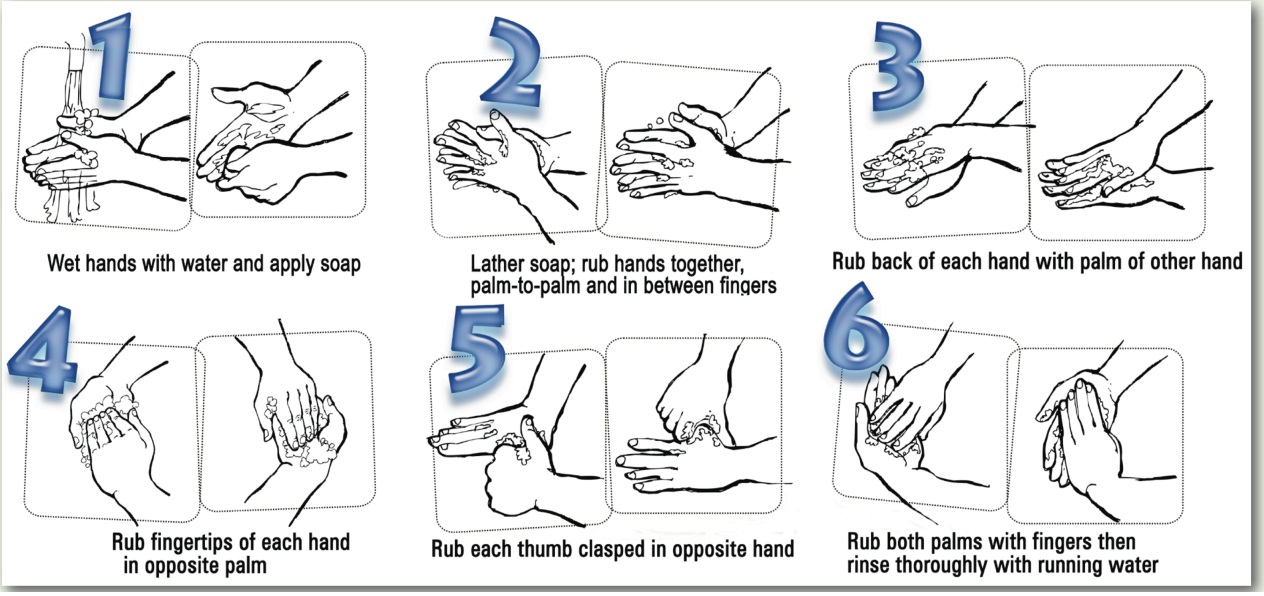
- Build body resistance
  - have plenty of sleep
  - drink plenty of fluids
  - eat nutritious food
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact, such as kissing, sharing cups, or sharing eating utensils with sick people.
- Clean and disinfect frequently touched surfaces such as doorknobs, etc.
- Observe proper handwashing.
- Cover nose & mouth with a tissue.



COVER YOUR NOSE & MOUTH WITH A TISSUE WHEN YOU COUGH OR SNEEZE.

THROW USED TISSUE PROPERLY.

OBSERVE PROPER HANDWASHING



I. Special Precautions due to Mass Gathering Events (i.e. Hajj Pilgrimage, international conferences)

WHO Policy Statement:
Health services are generally designed to meet routine priorities and demands, and their built-in redundancies are usually fairly limited. Very large mass gatherings, whether international (such as the Olympic Games, the Hajj or the World Youth Day) or national, may require major strengthening of existing services and potentially the introduction of new or enhanced methods for managing disease and other public health risks (e.g. epidemiological and environmental health surveillance methods, SOPs, and establishment of a public health response command and coordination structure within and between public health sectors).

Objective
To provide advice about prevention, detection and management of outbreaks of communicable disease, as well as the integration of the planning process into the full range of public health activities that need to be undertaken during Mass Gatherings

Guidelines

WHO assesses the risks posed by communicable diseases events against five benchmarks:

a. Outbreak with an unexpectedly high mortality or morbidity
b. Outbreak with potential international repercussions
c. Potential or actual international disease spread
d. Interference with international travel or trade
e. Outbreak in which international assistance is likely to be needed for disease control.

Considerations for heath promotion and prevention activities include:

a. Identify, through risk assessment and historic surveillance, the most probable public health and communicable disease threats
b. Develop appropriate health promotion and prevention education messages and tools
c. Work with event organizers to promote and make available health information in event information packages for participants or visitors
d. Identify recommended, but not prescriptive, travel health recommendations – including for immunizations, safe practices (regarding sex, sharing water bottles, etc.), hand washing, cough etiquette, etc.
e. Offer practical advice on how to access medical assessment or services in the event of illness, and specific directions for doing so (e.g. call first before visiting hospitals, etc.)
f. Establish, and advertise the availability of, a toll-free health information

line with interpretation capacity

g. Consider utilizing mobile public health intervention/response teams throughout the duration of the event
h. Produce educational tools in multiple languages as required
i. Utilize multiple approaches for risk communication, including use of the Internet – and link online risk communication information to the main event website.

WHO World Travel Advice on MERS-CoV for Pilgrimages

Actions for countries to take in preparation for Umra and Hajj

Countries should advise travellers that persons with pre-existing major medical conditions (e.g. chronic diseases such as diabetes, chronic lung disease, immunodeficiency) are more likely to develop severe infection for MERS if they are exposed to the virus. Pilgrims should be advised to consult a health care provider before travelling to review the risk and assess whether making the pilgrimage is advisable.

Countries should advise travellers and travel organizations on general travel health precautions, which will lower the risk of infection in general, including influenza and traveller's diarrhoea.

Specific emphasis should be placed on:

- hand hygiene and respiratory hygiene (covering mouth and nose when coughing or sneezing, washing hands after contact with respiratory secretions, and keeping a distance of one metre with other persons when having acute febrile respiratory symptoms);
- adhering to good food-safety practices, such as avoiding undercooked meat or food prepared under unsanitary conditions, and properly washing fruits and vegetables before eating them;
- maintaining good personal hygiene

Countries should make health related advice available to all travellers departing for Umra or Hajj by working with the travel and tourism sectors and placing such materials at strategic locations (eg. travel agent offices or points of departure in airports). Different kinds of communication, such as health alerts on board of planes and ships, and banners, pamphlets and radio announcements at international points of entry, can also be used to reach travellers. Travel advice should include current information on MERS-CoV and guidance on how to avoid illness while travelling.

Countries should distribute current WHO guidelines, or their national equivalents, on surveillance, infection prevention and control measures4 and clinical management of MERS-CoV to health care practitioners and health care facilities.

Countries should ensure that they have access to adequate laboratory services for testing for MERS-CoV and that information on how to obtain laboratory services and clinical referral is known to health care providers and facilities.

Countries should advise travellers to delay their travel if they develop a significant acute respiratory illness with fever and cough.

Countries should provide medical staff accompanying pilgrims with up to date information and guidance on MERS-CoV, ensuring that:

- they are alert to the early signs of a developing respiratory infection and pneumonia:
- they know who is considered to be in a high-risk group;
- they know what to do when a suspected case is identified;
- they are aware of simple health measures to reduce transmission.

Actions to take during Umra or Hajj

Countries should advise travellers that if they develop a significant acute respiratory illness with fever and cough (severe enough to interfere with usual daily activities) during Umra or Hajj,they should:

- report to the medical staff accompanying the group or to the local health services;
- cover their mouth and nose when coughing or sneezing, wash hands afterwards, or if this is not possible, cough or sneeze into upper sleeves of their clothing;
- avoid attending crowded places and preferably isolate themselves until the end of the respiratory symptoms and, if isolation is not possible, use a tissue for covering nose and mouth or a surgical mask when in crowded places.

Countries should advise travellers to avoid close contact with camels, visit farms and consume unpasteurized camel milk, urine or improperly cooked meat.

Actions to take after Umra or Hajj

Countries should advise returning travellers that if they develop a significant acute respiratory illness with fever and cough (severe enough to interfere with usual daily activities) during the two weeks after their return, they should:
seek medical attention, informing health attendants of their recent travel for Umra or Hajj;

- immediately notify their local health authority;
- take precautions when coughing or sneezing;
- minimize their contact with others to keep from infecting them.

Countries should alert health practitioners and facilities to test returning travellers

with a clinical presentation that suggests the diagnosis of MERS-CoV to be tested for MERS-CoV and to implement infection prevention and control measures. Confirmed cases of MERS-CoV must be reported to WHO. Clinicians should also be alerted to the possibility of atypical presentations in patients who are immunocompromised.

References:

Communicable disease alert and response for mass gatherings. Key considerations. June 2008. http://www.who.int/csr/Mass_gatherings2.pdf

Convention on International Civil Aviation. http://www.icao.int/publications/Documents/7300_cons.pdf

DOH Department Memorandum No. 2009-0297: Interim Guidelines No. 22 for H1N1 – Clinical Management of Suspected and Confirmed Human Pandemic (H1N1) Infection. November 28, 2009.

DOH Department Memorandum No. 2013-0205: Technical Guidelines Standards and Other Instructions for Reference in the Surveillance on Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

European Manual for Hygiene Standards and Communicalbe Diseases Surveillance on Passenger Ships. European Commission Directorate General for Health and Consumers. European Union Sanitation Training Network. October 2011. http://www.shipsan.eu/Portals/0/docs/SHIPSAN_Manual.pdf

Infection prevention and control during health care for probable or confirmed cases of novel coronavirus (nCoV) infection. Interim guidance 6 May 2013. http://www.who.int/csr/disease/coronavirus_infections/IPCnCoVguidance_06May13.pdf?ua=1

International Health Regulations (2005).World Health Organization. http://whqlibdoc.who.int/Publications/2008/9789241580410_eng.pdf

Passenger Contact Tracing. International Air Transport Association. http://www.iata.org/whatwedo/safety/health/Documents/health-passenger-contact-tracing.pdf

Passive Passenger Screening for Passenger Agents. International Air Transport Association. http://www.iata.org/whatwedo/safety/health/Documents/passive-passenger-screening-pax-agents.pdf

Principles of Epidemiology in Public Health Practice, 3rd Edition. http://www.cdc.gov/osels/scientific_edu/ss1978/lesson1/section11.html

Rapid advice note on home care for patients with Middle East respiratory syndrome coronavirus (MERS-CoV) infection presenting with mild symptoms and management of contacts. http://www.who.int/csr/disease/coronavirus_infections/MERS_home_care.pdf?ua=1). August 8, 2013.

Request Form for Passenger Contact Tracing. International Air Transport Association. http://www.iata.org/whatwedo/safety/health/Documents/request-form-passenger-contact-tracing.pdf

Roth DZ, Henry B. Social Distancing as a Pandemic Influenza Prevention Measure. National Collaborating Centre for Infectious Diseases. July 2011.

SARS: breaking the chains of transmission. World Health Organization. http://www.who.int/features/2003/07/en/

Social Distancing Protocol. Center for Infectious Disease Research and Policy. University of Minnesota. http://www.cidrap.umn.edu/sites/default/files/public/php/67/67_decision_protocol.pdf

The International Maritime Organization (IMO) Passenger Ship Safety Initiative. http://www.imo.org/OurWork/Safety/Regulations/Documents/Article-Seaways%20Magazine.pdf

Tuberculosis and Air Travel: Guidelines for Prevention and Control, 3rd edition. World Heatlh Organization. http://www.who.int/tb/publications/2008/WHO_HTM_TB_2008.399_eng.pdf

WHO Communicable Disease Alert and Response for Mass Gatherings

WHO World Travel Advice on MERS-CoV for Pilgrimages. June 3, 2014. http://www.who.int/ith/updates/20140603/en/

APPENDICES:

A - Annex 8 of International Health Regulations (IHR) 2005: Model of Maritime Declaration of Health

B - Health Declaration Checklist

C - DOH Interim Guidelines No.1 for Enhanced Surveillance on MERS-CoV

D - DOH Interim Guidelines No.2 for Middle East Respiratory Syndrome (MERS-CoV) Contact Tracing

APPENDIX A

ANNEX 8

MODEL OF MARITIME DECLARATION OF HEALTH

To be completed and submitted to the competent authorities by the masters of ships arriving from foreign ports.
Submitted at the port of …….. Date ……
Name of ship or inland navigation vessel ……..…..…..… Registration/IMO No .....arriving from ……..……sailing to .....
(Nationality)(Flag of vessel) …… Master's name .....
Gross tonnage (ship) ……..
Tonnage (inland navigation vessel) ……
Valid Sanitation Control Exemption/Control Certificate carried on board? Yes ..... No …..... Issued at …..…..…… date …….....
Re-inspection required? Yes ……. No …….
Has ship/vessel visited an affected area identified by the World Health Organization? Yes ..... No …..
Port and date of visit ……..…….....
List ports of call from commencement of voyage with dates of departure, or within past thirty days, whichever is shorter:
.....

Upon request of the competent authority at the port of arrival, list crew members, passengers or other persons who have joined ship/vessel since international voyage began or within past thirty days, whichever is shorter, including all ports/countries visited in this period (add additional names to the attached schedule):

(1) Name ……joined from: (1) ……..…….…..…..(2) ……..…..……...(3) .....
(2) Name ……joined from: (1) ……..…….....(2) ……..……...…..…(3) .....
(3) Name ……joined from: (1) ……..…….....(2) ……..…..…..……(3) .....

Number of crew members on board ……
Number of passengers on board …….

Health questions

(1) Has any person died on board during the voyage otherwise than as a result of accident? Yes .... No …..
If yes, state particulars in attached schedule. Total no. of deaths .....

(2) Is there on board or has there been during the international voyage any case of disease which you suspect to be of an infectious nature? Yes..... No…..... If yes, state particulars in attached schedule.

(3) Has the total number of ill passengers during the voyage been greater than normal/expected? Yes .... No …..
How many ill persons? .....

(4) Is there any ill person on board now? Yes ..... No ……. If yes, state particulars in attached schedule.

(5) Was a medical practitioner consulted? Yes ..... No …... If yes, state particulars of medical treatment or advice provided in attached schedule.

(6) Are you aware of any condition on board which may lead to infection or spread of disease? Yes ..... No ……..
If yes, state particulars in attached schedule.

(7) Has any sanitary measure (e.g. quarantine, isolation, disinfection or decontamination) been applied on board? Yes ..... No …...
If yes, specify type, place and date .....

(8) Have any stowaways been found on board? Yes ..... No …... If yes, where did they join the ship (if known)? .....

(9) Is there a sick animal or pet on board? Yes ..... No .....

Note: In the absence of a surgeon, the master should regard the following symptoms as grounds for suspecting the existence of a disease of an infectious nature:

(a) fever, persisting for several days or accompanied by (i) prostration; (ii) decreased consciousness; (iii) glandular swelling; (iv) jaundice; (v) cough or shortness of breath; (vi) unusual bleeding; or (vii) paralysis.

(b) with or without fever: (i) any acute skin rash or eruption; (ii) severe vomiting (other than sea sickness); (iii) severe diarrhoea; or (iv) recurrent convulsions.

I hereby declare that the particulars and answers to the questions given in this Declaration of Health (including the schedule) are true and correct to the best of my knowledge and belief.

Signed ……

Master

Countersigned ……

Ship's Surgeon (if carried)

Date ……

ATTACHMENT TO MODEL OF MARITIME DECLARATION OF HEALTH

Name	Class or rating	Age	Sex	Nationality	Port, date joined ship/vessel	Nature of illness	Date of onset of symptoms	Reported to a port medical officer?	Disposal of case [1]	Drugs, medicines or other treatment given to patient	Comments

[1] State: (1) whether the person recovered, is still ill or died; and (2) whether the person is still on board, was evacuated (including the name of the port or airport), or was buried at sea.

APPENDIX B

"For your own protection; for the safety of your family and the community"

HEALTH DECLARATION CHECKLIST

TO ALL TRAVELERS:

IMPORTANT REMINDER: Accomplish this form honestly and completely to facilitate quarantine procedures. Anyone found giving false information is liable and punishable in accordance with Philippine laws.

Travel History:

Arrival Date _____ Port of Origin _____ Flt # _____ Seat #:_____

Countries visited for the past two (2) weeks:

_____ _____ _____

_____ _____ _____

Personal Data:

Name: _____

Last Name *First Name* *Middle Name*

Sex____ Age____ Nationality _____ Civil Status: _____

Occupation:

[ ] Works in a Hospital, clinic or nursing home

[ ] Household help

[ ] Other (specify): _____

Address in the Philippines _____

_____

Tel / Mobile No. _____

Please check if you have any of the following at present or during the past 14 days:

[ ] Fever	[ ] Cough	[ ] Severe Diarrhea
[ ] Headache	[ ] Difficulty of Breathing	
[ ] Sore Throat	[ ] Unexplained Bruising or Bleeding	
[ ] Body Weakness	[ ] others (specify) _____	

	Yes	No
Did you visit any health worker, hospital, clinic or nursing home?	[ ]	[ ]
Did you visit any poultry farm or animal market?	[ ]	[ ]
Were you confined in a hospital?	[ ]	[ ]
Do you have any household member/s, or close friend/s who have met a person currently having fever, cough and/or respiratory problems?	[ ]	[ ]
Did you take anti-fever medication during the last 4-6 hours?	[ ]	[ ]

_____

Signature of Passenger / Crew

Note: If you have been to a MERS-CoV affected country/ies:

a. Monitor your health for at least fourteen (14) days.

b. Should you develop signs and symptoms, cover your mouth and nose with a piece of cloth, handkerchief or surgical mask to prevent spread of infection.

c. You may call any of the following numbers:

Bureau of Quarantine	Tel. No. (632) 320-9101 Tel. No. (632) 320-9107
OPCEN-HEMS	Tel Nos. +63 922-884-1564 +63 920-949-8419 +63 915-772-5621
National Epidemiology Center (NEC)	Tel. No. (632) 743-1937
Department of Health (DOH)	Tel. No. (632) 743-1937

For Foreign Tourists: If you have developed signs and symptoms during your stay, please contact the local health authorities for management and coordination with the Department of Health.

To the PHYSICIAN:

The bearer has recently been abroad, and could have been exposed to MERS-CoV. Please refer the individual to the Municipal Health Officer or to the Bureau of Quarantine or Center for Health Development (CHD) for further management and monitoring by the Surveillance Unit of the Area.

(Sgd.) **EMMANUEL C. LABELLA, MD, MHA, CESE**
OIC-Director IV
Bureau of Quarantine

Approved:

(Sgd.) **ENRIQUE T. ONA, FPCS, FACS**
Secretary of Health

APPENDIX C

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 (≥ 38°C , 100.4°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 (≥ 38°C , 100.4°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

* 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

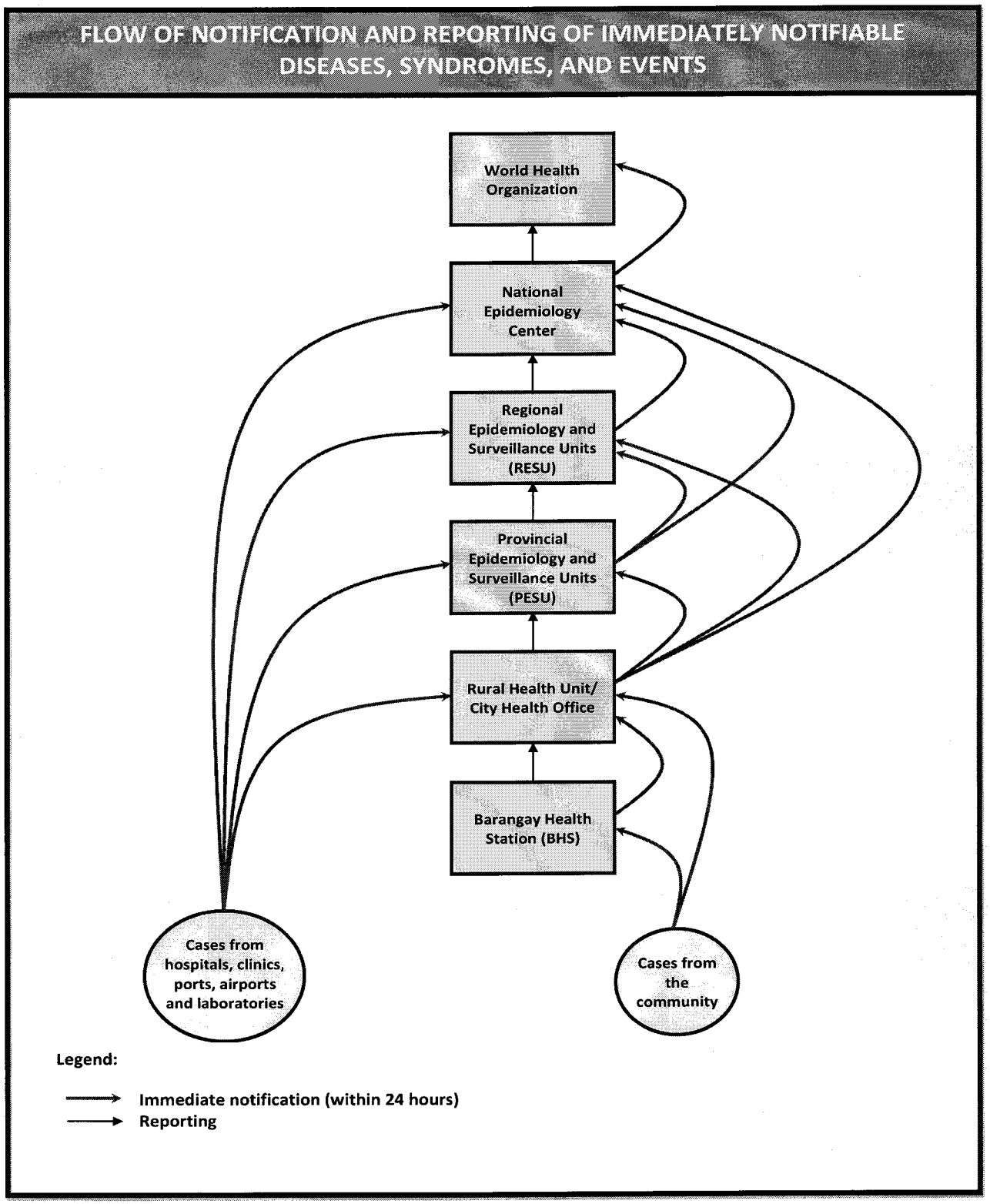
- A person with laboratory confirmation of infection with MERS-CoV.

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

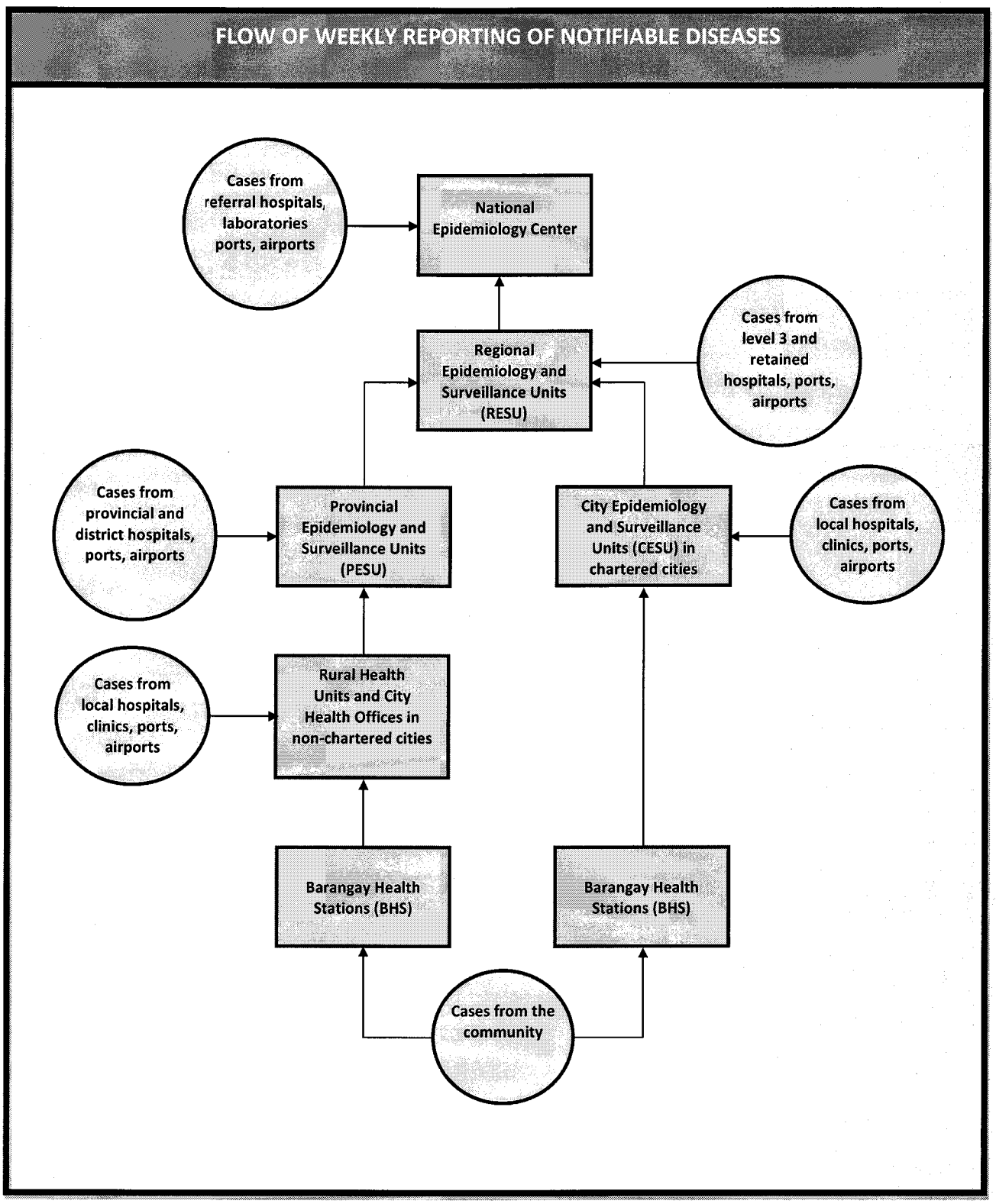
1. The notification and reporting of immediately notifiable diseases, syndromes and events shall follow the described in Annex A.1.
2. Weekly reporting of ILI cases under the PIDSR shall be pursued. All epidemiology and surveillance units are required to provide weekly zero reports to the next higher 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.

Annex A.1

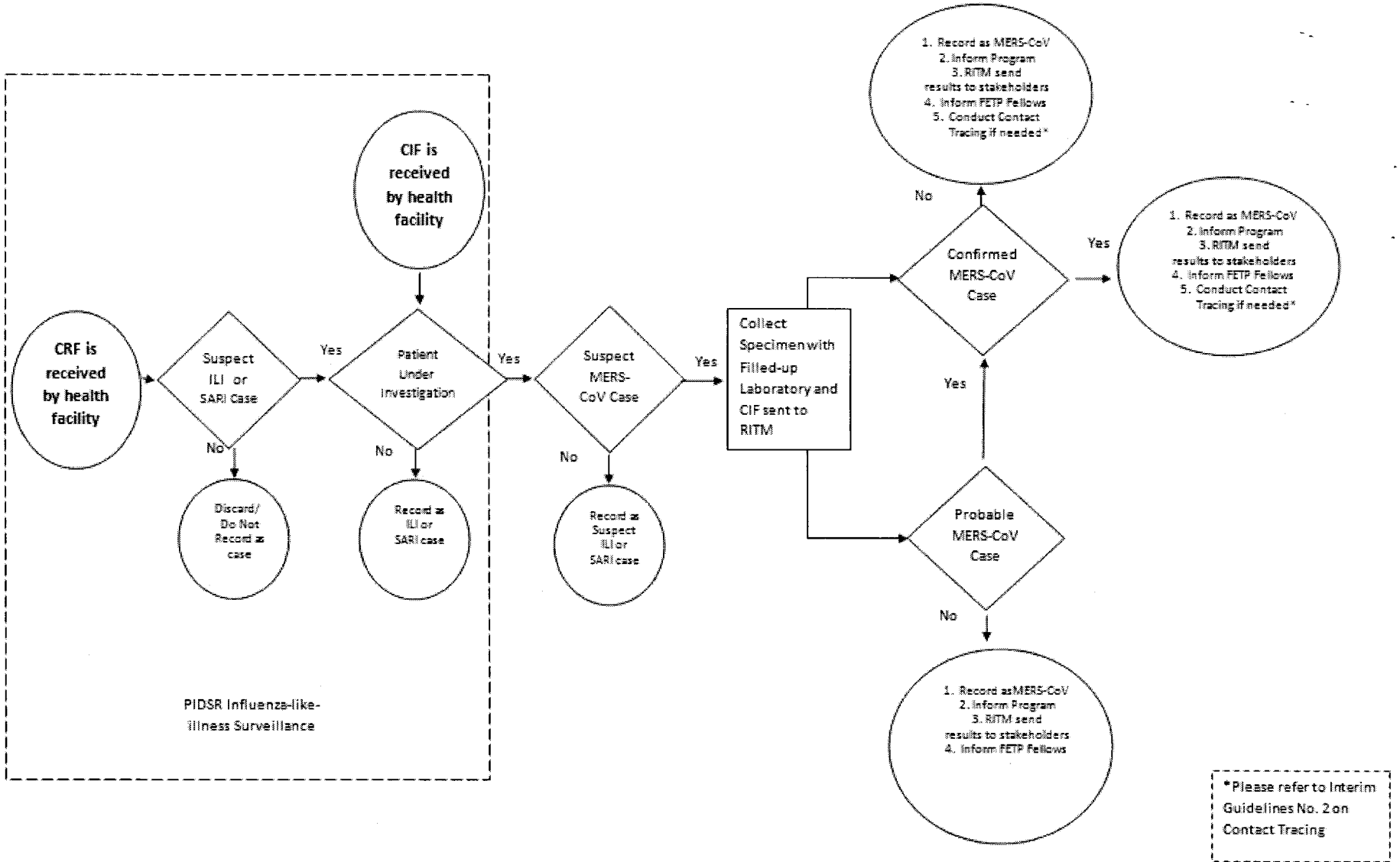

FLOW OF NOTIFICATION AND REPORTING OF IMMEDIATELY NOTIFIABLE DISEASES, SYNDROMES, AND EVENTS
World Health Organization
National Epidemiology Center
Regional Epidemiology and Surveillance Units (RESU)
Provincial Epidemiology and Surveillance Units (PESU)
Rural Health Unit/ City Health Office
Barangay Health Station (BHS)
Cases from hospitals, clinics, ports, airports and laboratories
Cases from the community
Legend:
Immediate notification (within 24 hours)
Reporting

Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

Annex A.2



Annex B


CRF is received by health facility
Suspect ILI or SARI Case
Yes
No
Discard/ Do Not Record as case
CIF is received by health facility
Patient Under Investigation
Yes
No
Record as ILI or SARI case
Suspect MERS-CoV Case
Yes
No
Record as Suspect ILI or SARI case
Collect Specimen with Filled-up Laboratory and CIF sent to RITM
Confirmed MERS-CoV Case
Yes
No
1. Record as MERS-CoV
2. Inform Program
3. RITM send results to stakeholders
4. Inform FETP Fellows
5. Conduct Contact Tracing if needed*
Yes
1. Record as MERS-CoV
2. Inform Program
3. RITM send results to stakeholders
4. Inform FETP Fellows
5. Conduct Contact Tracing if needed*
Probable MERS-CoV Case
Yes
No
1. Record as MERS-CoV
2. Inform Program
3. RITM send results to stakeholders
4. Inform FETP Fellows
PIDSR Influenza-like-illness Surveillance
*Please refer to Interim Guidelines No. 2 on Contact Tracing

Philippine Integrated Disease Surveillance

Case Investigation Form

Middle-East Respiratory Syndrome Coronavirus (MERS-CoV)

(Annex C)

Disease Reporting Unit/Hospital:		Name of Investigator:		Date of Interview:	
1. Patient Profile					
Last Name	First Name	Middle Name	Birthday:	Age	Sex
Occupation	Civil Status	Nationality	Educational Attainment		
2. Philippine Residence					
House No./Lot/Bldg	Street	District	Municipality/City		
Province	Region	Home Phone No	Cellphone No.		
3. Travel History					
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		
4. Overseas Employment Address					
Employer's Name:		**Occupation**	**Place of Work:**		
House No./Bldg Name	Street	City/Municipality	District		
Province/State	Country	Office Phone No.	Cellphone No.		
5. Countries Visited / Traveled / Worked in During Last 14 Days (Please check)					
Saudi Arabia ( )	United Arab Emirates ( )	Qatar ( )	Jordan ( )		
Others, specify: _____					
6. Exposure History					
History of Exposure to Known MERS-CoV Case	( ) Yes	( ) No	( ) Unk	Date of Contact with Known MERS-CoV Case:	
7. Clinical Information					
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? ☐ Y ☐ 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.			

Philippine Integrated Disease Surveillance and Response

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
☐Serum	___/___/___	___/___/___			
☐Oropharyngeal/ Nasopharyngeal swab?	___/___/___	___/___/___			
☐Others	___/___/___	___/___/___			

X. Final Classification

- ☐ Patient Under Investigation
- ☐ Suspected Influenza-like-illness
- ☐ Severe Acute Respiratory Infection
- ☐ Suspected MERS-CoV Case
- ☐ Probable MERS-CoV Case
- ☐ Confirmed MERS-CoV Case

XII. OUTCOME:

Date of Discharge	Final Diagnosis	Condition on Discharge: ( ) Died ( ) Improved ( ) Recovered ( ) Transferred ( ) Absconded

Patient Under Investigation

- A person with sudden onset of fever (≥ 38°C , 100.4°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 (≥ 38°C , 100.4°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

* 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.

DEPARTMENT OF HEALTH

RESEARCH INSTITUTE FOR TROPICAL MEDICINE

Alabang, Muntinlupa City, Metro Manila
(02) 8072628 to 32
www.ritm.gov.ph

Hospital No.: _____ **LABORATORY TEST REQUEST FORM** **Accession No.:** _____

I. PATIENT INFORMATION: (To be filled-up by requisitioner)

Name: (First, Middle, Last)	**Date of Birth:** (MM/DD/YYYY)	
Address: (Street, Barangay. District, Municipality, Province, Region)	**Gender:** ☐ M ☐ F	**Age:**(YY.MM)
Location/ Classification: ☐ OPD ☐ Referral ☐ AS ☐ RITM INPATIENT _____	**Date of Admission:** (MM/DD/YYYY)	
Clinical Impression: / **Suspected Agent:**	**Date of Onset of Illness:** (MM/DD/YYYY)	

II. REQUISITIONER INFORMATION: (To be filled-up by requisitioner)

Requisitioner (MD)/Disease Surveillance Officer (DSO) Name:		**Address:**			**Requisitioner MD/DSO/DRU Contact Details:** (at least 1) **Tel No.:** _____ **Fax No.:** _____ **Cell No.:** _____ **Email Address:** _____
Name of Disease Reporting Unit (DRU):	**Type of DRU:**	**Region:**	**Province:**	**Municipality:**	

III. HOSPITAL INFORMATION: (To be filled-up by RITM staff)

Date and Time of Specimen Receipt: (MM/DD/YYYY- HR:MIN)	**Received by:** printed name & signature	**Official Receipt No.**

IV. SPECIMEN INFORMATION AND LABORATORY TESTS: (To be filled-up by requisitioner. Please mark with an "X" the box of the requested examination with additional information as requested. For pre-collected specimens, requisitioner to indicate the date and time of sample collection at the space provided.)

	SPECIMEN TYPE							
LABORATORY EXAMINATION	NPS/OPS in VTM	NPS in APTM	Sputum	Serum	Respiratory specimen (specify type)	Fixed tissue (specify type, site & surgical procedure)	Blood in BHI	Others (specify type)
Influenza A H5N1 PCR								
Influenza A H7N9 PCR								
MERS Coronavirus PCR								
*pan*Coronavirus PCR								
Influenza A PCR and subtyping *for H1N1, H3N2 and H1N1 pdm09*								
Influenza B PCR								
RSV PCR								
Aerobic Culture and Sensitivity								
Atypical pneumonia PCR *Legionella, Mycoplasma and Chlamydophila*								
Invasive Bacterial Diseases PCR *S. pneumo, H. influ and N. meningitides*								
Electron Microscopy								
Histopathological Examination								
Others: (Refer to RITM Lab Menu)								
Date and Time Collected:								
Collected by:								
RITM Staff Only								
Specimen Acceptable?	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO

APPENDIX D

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 logics 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 occupiedthe 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

* 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 (3rd 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.

CTLinelist Form
Republic of the Philippines
Department of Health
NATIONAL EPIDEMIOLOGY CENTER
San Lazaro Compound, Rizal Avenue
Sta. Cruz, Manila
Tel. Nos.: 651-7800 loc 2930; TF: 743-6076

MERS-CoV Contact Tracing Line List

Confirmed Case ID: _____ Date: _____ Region: _____

Close Contact ID	Name (First, Last Name)	Address	Date of Birth	Age	Sex (M/F)	Contact No.	Date of Last Exposure	Nature of Contact* (HH, WS, S, T, A, HCW, O)	Under follow-up (Y/N)	Date of Symptoms developed	Date Quarantine Period Ends	Date Case Closed

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

ANNEX A

CTSL Form
Republic of the Philippines
Department of Health
NATIONAL EPIDEMIOLOGY CENTER
San Lazaro Compound, Rizal Avenue
Sta. Cruz, Manila
Tel. Nos.: 651-7800 loc 2930; TF: 743-6076

MERS-CoV Contact Tracing Symptom Log Sheets

Confirmed Case ID: _____ Date: _____ Region: _____

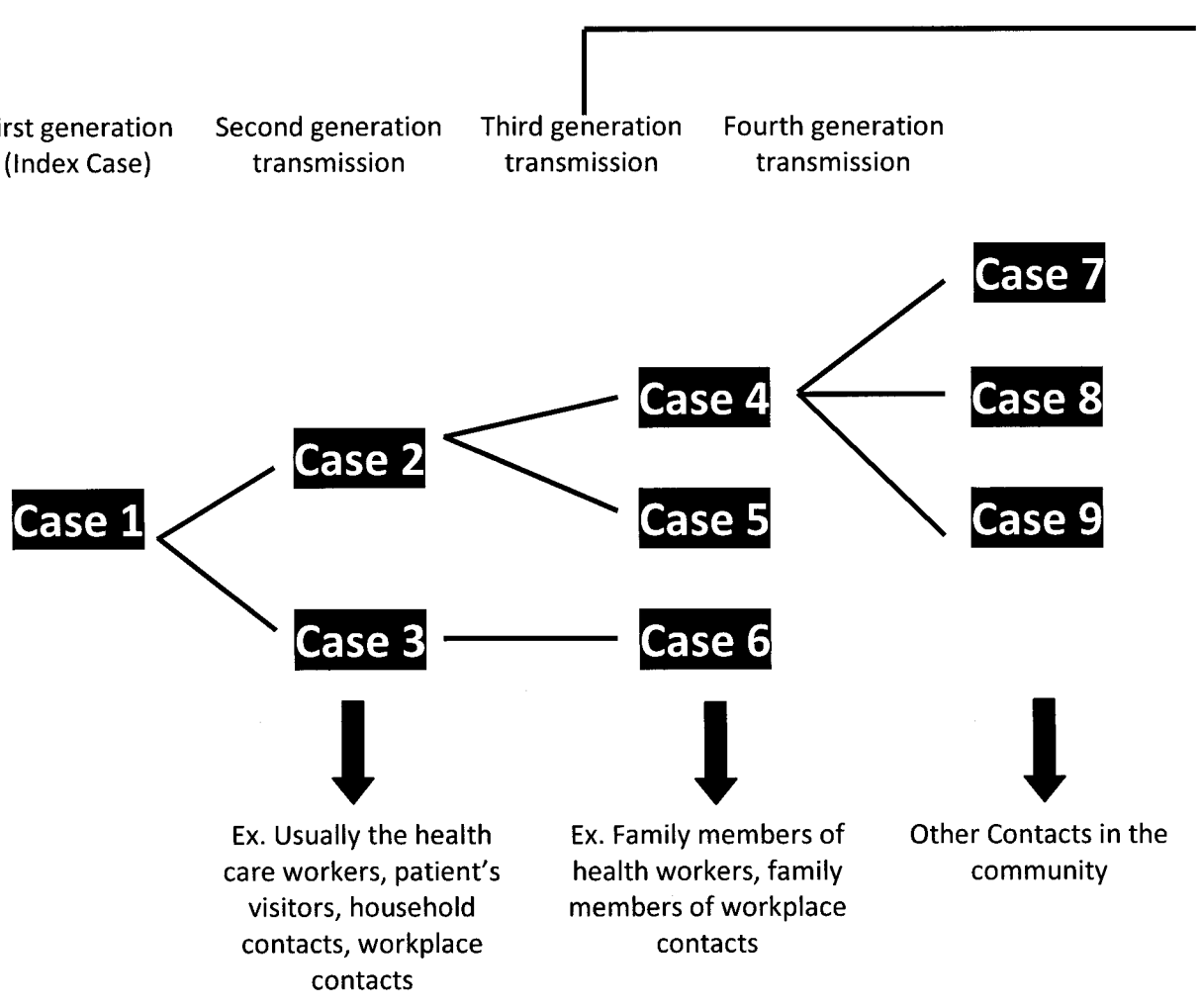
Close contact name: _____

Date of Last Exposure: _____ Date of Voluntary Quarantine Period Ends*: _____

Symptom	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
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

ANNEX C