KETUA PENGARAH KESIHATAN MALAYSIA
DIRECTOR GENERAL OF HEALTH MALAYSIA
Kementerian Kesihatan Malaysia
Aras 12, Blok E7, Kompleks E
Pusat Pentadbiran Kerajaan Persekutuan
62590 PUTRAJAYA

Tel : 03-8883 2545
Faks : 03-8889 5542
Web : anhisham@moh.gov.my

Ruj. Kami: KKM.600-29/4/134 JLD2(9)

Tarikh: 19 September 2017

SENARAI EDARAN

YBhg. Datuk / Dato' / Tuan / Puan,

Edaran Kemaskini *Guideline on Ebola Virus Disease (EVD) Management in Malaysia 2017*

Dengan segala hormatnya perkara di atas adalah dirujuk.

2. Sebagaimana YBhg. Datuk / Dato' / Tuan / Puan sedia maklum, melalui *the 9th Meeting of the International Health Regulations (IHR) Emergency Committee* yang telah diadakan pada 29 Mac 2016, pihak Pertubuhan Kesihatan Sedunia (WHO) telah mengumumkan bahawa kejadian jangkitan Ebola di Afrika Barat tidak lagi memenuhi kriteria *Public Health Emergency of International Concern* (PHEIC).

3. Selerusnya, sepanjang tempoh September 2014 hingga Februari 2016, pihak Kementerian Kesihatan Malaysia (KKM) telah mengeluarkan beberapa siri garis panduan yang berkaitan sebagai rujukan dan panduan untuk kegunaan anggota kerja KKM di pelbagai peringkat di lapangan.

4. Untuk makluman YBhg. Datuk / Dato' / Tuan / Puan, garis panduan tersebut wujud secara berasingan di antara satu dengan yang lain. Pada ketika ini, terdapat lima (5) dokumen berbeza yang perlu dibaca bersekali bagi perkara ini. Begitu juga, ada antara lampiran yang disertakan telah tidak lagi relevan dan ia seterusnya digantikan dengan lampiran yang dikemaskini serta terkandung di dalam Surat Edaran yang berikutnya.

5. Justeru, untuk memudahkan pelaksanaan aktiviti kesiapsiagaan dan respon bagi menghadapi potensi jangkitan EVD di Malaysia pada masa hadapan, keseluruhan dokumen tersebut perlu disatukan dan dimurnikan. Dokumen ini juga seterusnya ditambahbaik dengan penambahan aspek pengurusan jenazah Islam bagi kes yang disyaki atau disahkan dijangkiti EVD.

6. Sehubungan itu, bersama-sama ini dikemukakan Guideline *on Ebola Virus Disease (EVD) Management in Malaysia 2017* yang telah disediakan. Pihak YBhg. Datuk / Dato' / Tuan / Puan adalah dipohon untuk memaklumkan perkara ini dan mengedarkan dokumen ini untuk kegunaan anggota lapangan di bawah seliaan YBhg Datuk / Dato' / Tuan / Puan. Dokumen ini turut akan dimuat naik di laman sesawang rasmi KKM, iaitu di 'www.moh.gov.my'.

7. Sekiranya terdapat sebarang pertanyaan lanjut berhubung perkara ini ianya boleh dikemukakan kepada para pegawai berikut:

Nama Pegawai	: Dr. Norhayati binti Rusli
No. Telefon	: 03-8883 4145
No. Tel. Bimbit	: 019-315 4610
E-mel	: dr_norhayati@moh.gov.my

Nama Pegawai	: Dr. Wan Noraini binti Wan Mohamed Noor
No. Telefon	: 03-8883 4119
No. Tel Bimbit	: 019-220 2637
E-mel	: drwnoraini@moh.gov.my

6. Sila ambil maklum dan beri perhatian bahawa dokumen '*Guideline Ebola Virus Disease (EVD) Management in Malaysia 2017*' ini berkuatkuasa serta merta dari tarikh surat ini dikeluarkan. Perhatian dan kerjasama yang diberikan oleh pihak YBhg. Datuk / Dato' / Tuan / Puan berhubung perkara ini adalah amat dihargai dan didahului dengan ucapan terima kasih.

Sekian.

'BERKHIDMAT UNTUK NEGARA'

Saya yang menurut perintah,

(DATUK DR. NOOR HISHAM BIN ABDULLAH)
Ketua Pengarah Kesihatan Malaysia

s.k.

Timbalan Ketua Pengarah Kesihatan (Kesihatan Awam)

Timbalan Ketua Pengarah Kesihatan (Perubatan)

Timbalan Ketua Pengarah Kesihatan (Penyelidikan & Sokongan Teknikal)

SENARAI EDARAN

Pengarah
Bahagian Kawalan Penyakit

Pengarah
Bahagian Perkembangan Perubatan

Pengarah
Bahagian Pembangunan Kesihatan Keluarga

Pengarah
Institut Penyelidikan Perubatan (IMR)

Pengarah
Makmal Kesihatan Awam Kebangsaan Sg. Buloh, Selangor

Pengarah
Jabatan Kesihatan Negeri Perlis

Pengarah
Jabatan Kesihatan Negeri Kedah

Pengarah
Jabatan Kesihatan Negeri Pulau Pinang

Pengarah
Jabatan Kesihatan Negeri Perak

Pengarah
Jabatan Kesihatan Negeri Selangor

Pengarah
Jabatan Kesihatan WP Kuala Lumpur & Putrajaya

Pengarah
Jabatan Kesihatan Negeri N. Sembilan

Pengarah
Jabatan Kesihatan Negeri Melaka

Pengarah
Jabatan Kesihatan Negeri Johor

Pengarah
Jabatan Kesihatan Negeri Pahang

Pengarah
Jabatan Kesihatan Negeri Terengganu

Pengarah
Jabatan Kesihatan Negeri Kelantan

Pengarah
Jabatan Kesihatan Negeri Sarawak

Pengarah
Jabatan Kesihatan Negeri Sabah

Pengarah
Jabatan Kesihatan WP Labuan

Pengarah
Hospital Kuala Lumpur

Pengarah
Institut Kanser Negara

Pengarah
Pusat Darah Negara

Ketua Pengarah Perkhidmatan Kesihatan
Markas Angkatan Tentera Malaysia
Bahagian Perkhidmatan Kesihatan
Kementerian Pertahanan

Chief Executive Officer (CEO)
Institut Jantung Negara

Pengarah
Pusat Perubatan Universiti Malaya
Lembah Pantai, Kuala Lumpur

Pengarah
Hospital Universiti Sains Malaysia
Kubang Kerian, Kelantan

Pengarah
Pusat Perubatan Universiti Kebangsaan Malaysia
Cheras, Selangor

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Master
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50400 Kuala Lumpur

President
Association of Private Hospitals of Malaysia
A-17-01, Menara UOA Bangsar
No. 5, Jalan Bangsar Utama 1
59000 Kuala Lumpur

President
Primary Care Doctor's Organisation Malaysia (PCDOM)
2, Jalan SS3/31,
University Garden,
47300, Petaling Jaya,
Selangor

President
Medical Practitioners Coalition Association of Malaysia (MPCAM)
No. 17-2, Jalan PJS 8/12
Dataran Mentari (Sunway)
46150 Petaling Jaya
Selangor

Chief Executive Officer (CEO)
Malaysia Healthcare Travel Council (MHTC)
Level 28, Lot 28-01, Tower 2.
Menara Kembar Bank Rakyat
Jalan Travers
50470 Kuala Lumpur

Guidelines on Ebola Virus Disease (EVD) Management in Malaysia 2017

Disediakan secara bersama oleh:

- Bahagian Kawalan Penyakit, KKM - Penyelaras
- Bahagian Perkembangan Perubatan, KKM
- Bahagian Pembangunan Kesihatan Keluarga, KKM
- Bahagian Perkhidmatan Farmasi, KKM
- Institut Penyelidikan Perubatan, Kuala Lumpur
- Makmal Kesihatan Awam Kebangsaan Sungai Buloh, Selangor
- Pasukan Pegawai Perubatan Pakar terlibat, dari pelbagai peringkat fasiliti KKM seluruh negara, yang meliputi disiplin berikut:
  - Kesihatan Awam
  - Penyakit Berjangkit
  - Kecemasan & Trauma
  - Patologi
  - Perubatan Forensik

Case Definition For Ebola Virus Disease (EVD)

Early recognition of EVD is critical for infection prevention and control. Healthcare providers should be alert for and evaluate any patients suspected of having EVD.

Person Under Investigation (PUI) for EVD
A person who has both consistent signs or symptoms and risk factors as follows should be considered a PUI for EVD:

a) Elevated body temperature or subjective fever or symptoms, including severe headache, fatigue, muscle pain, vomiting, diarrhoea, abdominal pain or unexplained haemorrhage; **and**

b) An epidemiological risk factor (refer ‘**Annex 1B**’) within the 21 days before the onset of symptoms.

Confirmed Case of EVD
A case with laboratory-confirmed diagnostic evidence of Ebola virus infection.

Source: *http://www.cdc.gov/vhf/ebola/healthcare-us/evaluating-patients/case-definition.html (as of 26 January 2015). Information will be updated from time to time based on the CDC USA website.*

'Annex 1B'

Epidemiologic Risk Factors To Consider When Evaluating A Person For Exposure To Ebola Virus

A. **HIGH RISK** includes any of the following:

In any country:

- Percutaneous (e.g. needle stick) or mucous membrane exposure to blood or body fluids (including but not limited to faeces, saliva, seat, urine, vomit and semen[1]) from a person with Ebola who has symptoms;
- Direct contact with a person with Ebola who has symptoms or the person's body fluids, while not wearing appropriate personal protective equipment;
- Processing blood or body fluids from a person with Ebola who has symptoms, while not wearing appropriate PPE or without using standard biosafety precautions;
- Providing direct care to a person showing symptoms of Ebola in a household setting.

In countries with widespread transmission or cases in urban settings with uncertain control measures:

- Direct contact with a dead body while not wearing appropriate PPE.

B. **SOME RISK** includes any of the following:

In any country:

- Being in close contact[2] with a person with Ebola who has symptoms while not wearing appropriate PPE.

In countries with widespread transmission:

- Being in close contact with a person with Ebola who has symptoms, while not wearing appropriate PPE;
- Being in the patient-care area of an Ebola treatment unit;
- Providing any direct patient care in non-Ebola healthcare settings.

[1] *Ebola virus can be detected in semen for months after recovery from the disease. Unprotected contact with the semen of a person who has recently recovered from Ebola may constitute a potential risk for exposure. The period of risk is not yet defined.*

[2] *Close contact is defined as being within approximately 1 metre of a person with Ebola while the person was symptomatic for a prolonged period of time while not using appropriate PPE.*

C. **LOW (BUT NOT ZERO) RISK** includes any of the following:

In any country:

- Brief direct contact (such as shaking hands) with a person in the early stages of Ebola, while not wearing appropriate PPE. Early signs can include fever, fatigue or headache;
- Brief proximity with a person with Ebola who has symptoms (such as being in the same room, but not in close contact) while not wearing appropriate PPE;
- Processing blood or body fluids from a person with Ebola who has symptoms, while wearing appropriate PPE or without using standard biosafety precautions;
- Traveling on an airplane with a person with Ebola who has symptoms and having had no identified some or high risk exposure.

In countries with widespread transmission, cases in urban settings with uncertain control measures, or former widespread transmission and current established control measures:

- Having been in one of these countries and having had no known exposures.

In any country other than those with widespread transmission:

- Brief direct contact (such as shaking hands) with a person in the early stages of Ebola, while not wearing appropriate PPE. Early signs can include fever, fatigue or headache;
- Brief proximity with a person with Ebola who has symptoms (such as being in the same room, but not in close contact) while not wearing appropriate PPE;

D. **NO IDENTIFIABLE RISK** includes any of the following:

- Processing of Ebola-containing specimens in a Biosafety Level 4 facility;
- Any contact with a person who isn't showing symptoms of Ebola, even if the person had potential exposure to Ebola virus;
- Contact with a person with Ebola before the person developed symptoms;
- Any potential exposure to Ebola virus that occurred more than 21 days previously;
- Having been in a country with Ebola cases, but without widespread transmission, cases in urban settings with uncertain control measures, or former widespread transmission and now established control measures, and not having had any other exposures;
- Having stayed on or very close to an airplane or ship (for example, to inspect the outside of the ship or plane or to load or unload supplies) during the entire time that the airplane or ship was in a country with widespread transmission or a country with cases in urban settings with

uncertain control measures, and having had no direct contact with anyone from the community;

- Having had laboratory-confirmed Ebola and subsequently been determined by public health authorities to no longer be infectious (i.e. Ebola survivors).

Source: *http://www.cdc.gov/vhf/ebola/exposure/risk-factors-when-evaluating-person-for-exposure.html (as of 28 August 2015). Information will be updated from time to time based on the CDC USA website.*

NOTA:

*Sila rujuk '**Annex 1C**' bagi pengkelasan negara yang melaporkan kejadian jangkitan Ebola sebagaimana ketetapan pihak CDC USA (yang digunapakai seperti tersebut di atas).*

'Annex 1C'

CDC Classification of Countries with Reported Ebola Cases

Widespread transmission	**Affected areas**
No countries currently in this classification	None

Countries with former widespread transmission and current, established control measures[1]	**Affected areas**
Liberia	Entire country
Sierra Leone	Entire country
Guinea	Entire country

Cases in urban settings with uncertain control measures[2]	**Affected areas**
No countries currently in this classification	None

Cases in urban settings with effective control measures	**Affected areas**
No countries currently in this classification	None

Previously affected countries[3]	**Affected areas**
Nigeria	Lagos, Port Harcourt
Senegal	Dakar
Spain	Madrid
United States	Dallas, New York City
Mali	Bamako
United Kingdom	Scotland, England
Italy	Sardinia

Source: *http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html (as of 17 March 2016). Information will be updated from time to time based on the CDC USA website.*

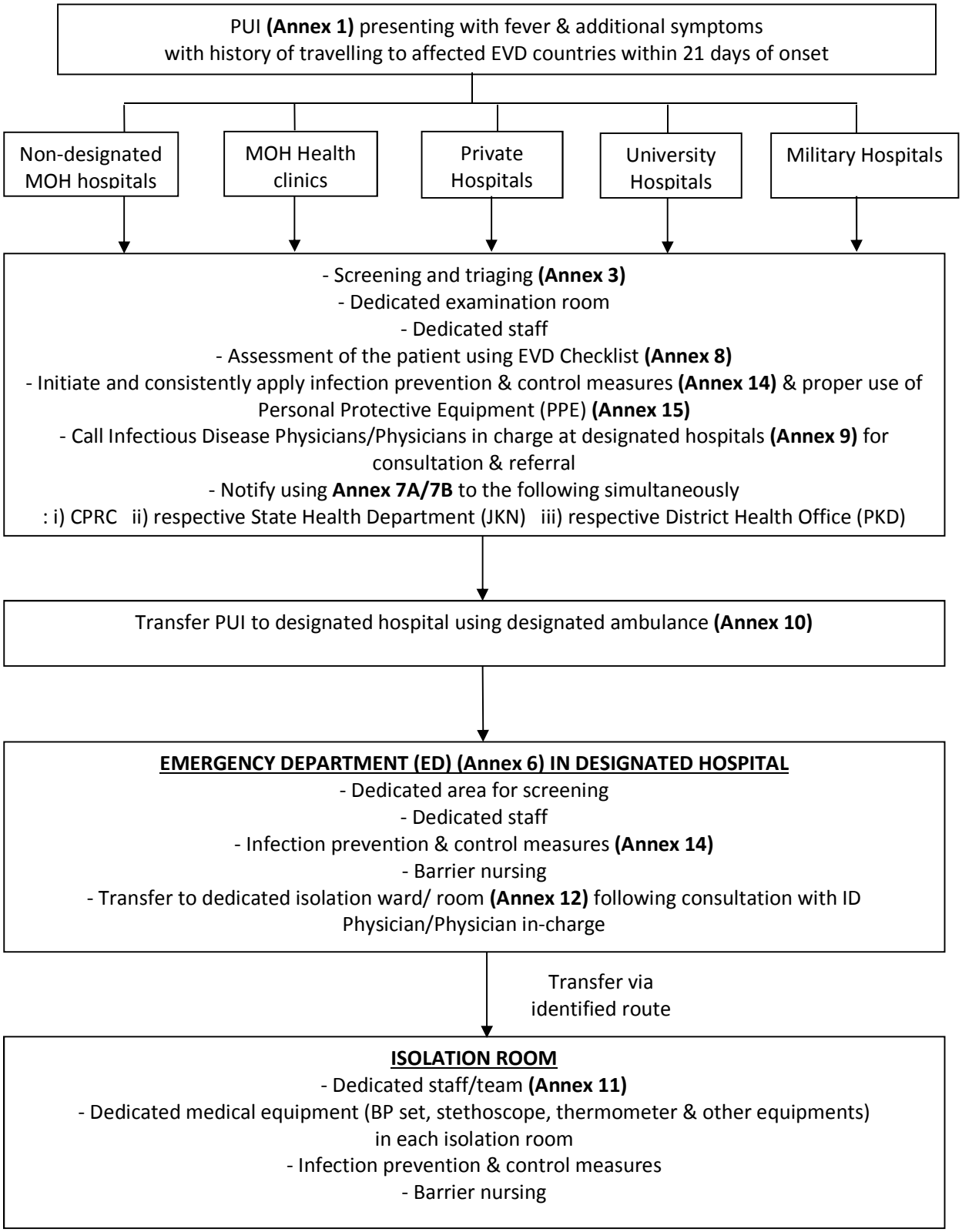
[1] *This category also includes countries that have experienced widespread transmission but are transitioning to being declared free of Ebola. The World Health Organization (WHO) is responsible for determining when a country will be declared free of Ebola virus transmission.*

[2] *Transmission in urban areas indicates the potential for spread through international air travel. Control measures in these countries are considered to be uncertain because of the inability of public health authorities to identify, locate or monitor a large proportion of potential contacts. People arriving from these countries should be screened upon entry.*

[3] *In these countries, which previously had locally acquired or imported Ebola cases, at least 42 days (two incubation periods) have elapsed since the last day that any person in the country had contact with a person with confirmed Ebola.*

'Annex 2'

FLOW CHART: MANAGEMENT OF PERSON UNDER INVESTIGATION (PUI) FOR EBOLA VIRAL DISEASE (EVD)



'Annex 3'

SCREENING AND TRIAGING AT MOH HEALTH CLINICS, PRIVATE CLINICS (GPs), UNIVERSITY HOSPITALS, MILITARY HOSPITALS, NON-DESIGNATED MOH HOSPITALS & PRIVATE HOSPITALS

- A special area should be set up for suspected EVD patients to which patients can come directly
- The PUI should be managed by a dedicated team where possible
- All patients who come to the respective health facilities should also be screened for suspected EVD at triage

- **<u>WHEN SHOULD I SUSPECT EBOLA?</u>**

  Ebola is to be suspected when a patient has come from an Ebola affected country or city* in the last 21 days and has:

  - Elevated body temperature with additional symptoms such as severe headache, muscle pain, vomiting, diarrhoea, abdominal pain, or unexplained haemorrhage

  AND; EITHER

  - met, visited, took care of or participated in funeral rites of a patient known or suspected to have Ebola within the last 21 days

  OR

  - been admitted to or worked in a health care facility in those affected areas in the last 21 days

Kindly refer to the latest MOH reference for the list of affected countries

- To reduce the chances of unintended exposure, the screening questions listed above are preferably asked during triaging

- Should a patient have **ANY OF THE LISTED CRITERIA** met, to institute infection prevention and control measures as listed below:

    - Place patients at least 1 m away from other patients or health care workers

    - Ensure strict hand hygiene for all clinic staff and suspected patient

    - Provide tissues to patient to help contain any secretions or body fluids

    - If expecting any splashes or exposure to bodily fluids, the encounter would require the health care personal to don water resistant gowns, gloves, masks and goggles

    - After the encounter, ensure proper disposal of all personal protective equipment described above (refer **Annex 14 & 15**)

    - All patient contact areas should be wiped down with sodium hypochlorite (refer **Annex 14**) including:

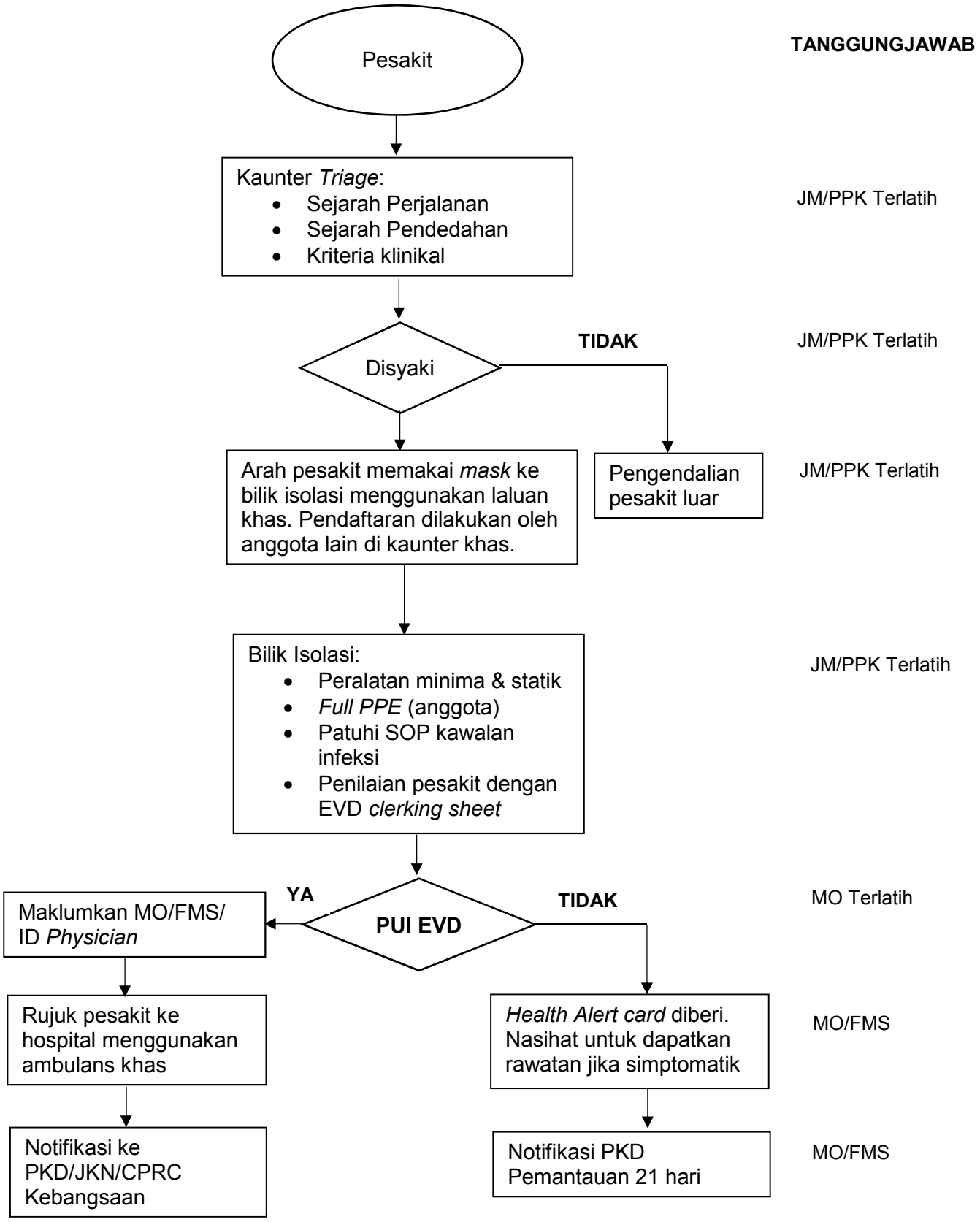
        - trolley or wheelchair used to transport the patient
        - examination room area
        - any area that has been contaminated with the PUI body secretion (e.g. vomitus or spills)

- For private clinics / General Practitioners (GPs):

    - To call the respective District Health Office (PKD) for advice on patient's referral and conveying preliminary information – refer to **Annex 36** for contact details of the National CPRC and State Health Deaprtments.

'Annex 4'

Proses Kerja Pengendalian Pesakit Disyaki Ebola Virus Disease (PUI EVD) di Klinik Kesihatan



Flow Chart For Management of Person Under Investigation (PUI) of Ebola Virus Disease (EVD) Attended By General Practitioners (GPs)

PUI **(Annex 1)** presenting with fever & additional symptoms with history of travelling to affected EVD countries within 21 days of onset

↓

Private Clinics (GPs):
-Screening and triaging **(Annex 3)**
-Dedicated area for examination
-Dedicated staff
-Initiate and consistently apply infection prevention & control measures **(Annex 14)** and proper use of Personal Protective Equipment (PPE) **(Annex 15)**
-Assessment of the patient using EVD Clerking Sheet **(Annex 8)**
-Call Rapid Assessment Team (RAT) representative of the respective District Health Office (PKD) **(Annex 36)** for consultation (keeping in view patient's referral)

↓

Consultation with the RAT Representative (via phone)

↓

(A) Private Clinics (GPs):
-Maintain appropriate infection prevention & control measures **(Annex 14)** and proper use of Personal Protective Equipment (PPE) **(Annex 15)**
-To notify using **Annex 7A/7B** to the following simultaneously:
- The National CPRC
- The respective State Health Department (JKN)
- The respective District Health Office (PKD)

-Arrange of patient's transfer

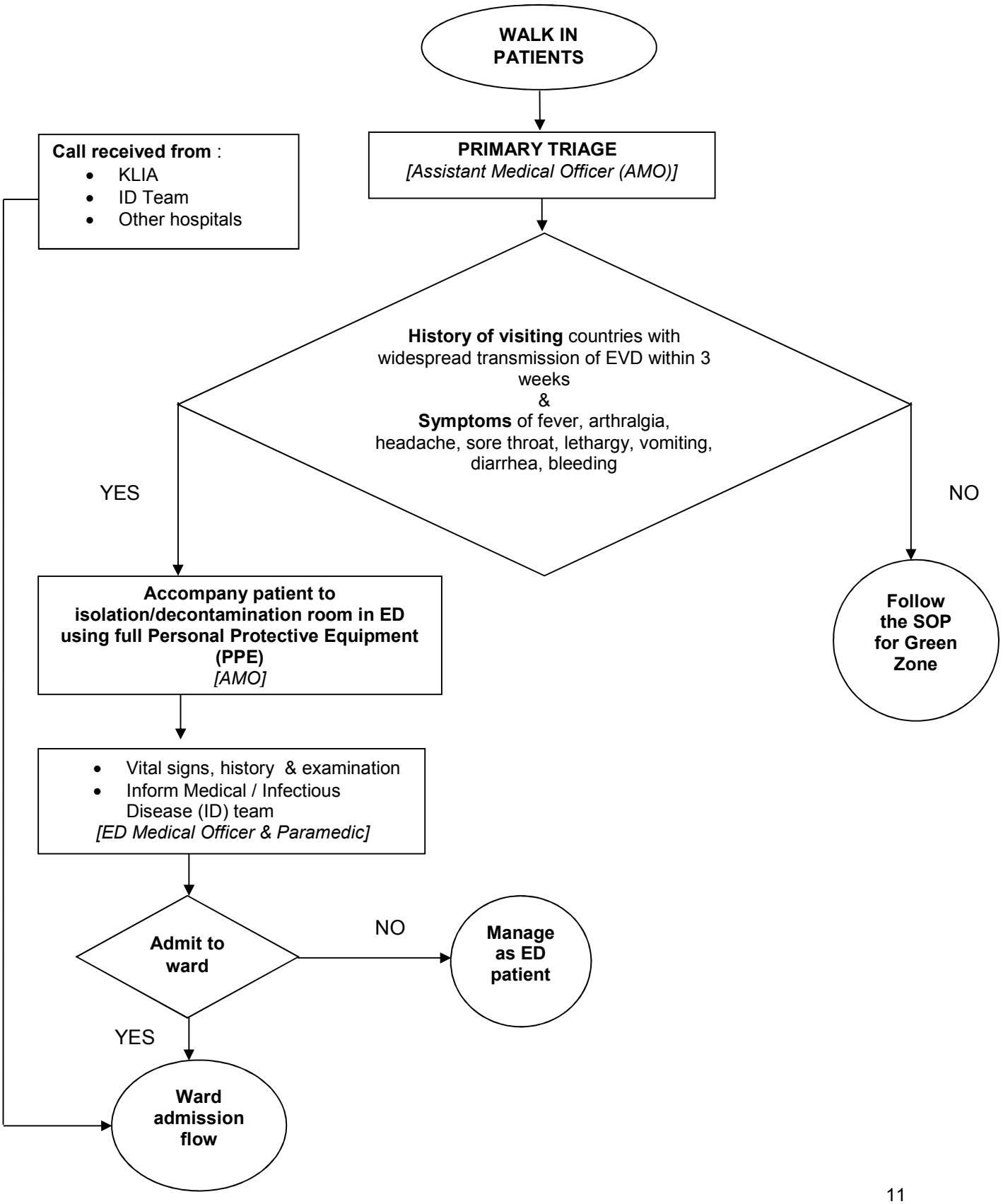
(B) The Respective PKD:
-Immediate referral to the nearest hospital:
- Following consultation with the physician
- To transfer patient to the designated hospital **(Annex 9)** using dedicated ambulance as identified by respective PKD

↓

Emergency Department (ED) of Designated Hospital:
-Continue management as **Annex 6**

'Annex 6'

FLOW CHART FOR MANAGEMENT OF PUI EVD PATIENT AT EMERGENCY & TRAUMA DEPARTMENT (ED) IN DESIGNATED HOSPITALS



MANAGEMENT OF EBOLA VIRAL DISEASE IN EMERGENCY DEPARTMENTS

- All EDs should form a dedicated team for management of suspected EVD patients to minimize risk of exposure

- All EDs are to prepare an isolation area/room for management of suspected cases

- PPE as per recommendation should be worn all the time when managing patients

- Ambulance that has been used to ferry the suspected EVD patients should be decontaminated at the designated ambulance decontamination area in the designated receiving hospitals

- It is advisable to have a dedicated ambulance for transport of suspected cases

- Staff from other health facility that accompany patient should undergo decontamination in the designated receiving hospital ED before returning to their respected base.

- Unless patient is unstable ALL IV line, blood and radiological investigations are to be carried out in the inpatient isolation ward

Annex 7A

JADUAL
(Peraturan 2)
Borang
(Peraturan 2)
AKTA PENCEGAHAN DAN PENGAWALAN PENYAKIT BERJANGKIT 1988
PERATURAN-PERATURAN PENCEGAHAN DAN PENGAWALAN PENYAKIT BERJANGKIT (BORANG NOTIS (PINDAAN) 2011

Borang Notis: Rev/2010
No. Siri:

NOTIFIKASI PENYAKIT BERJANGKIT YANG PERLU DILAPORKAN

(Seksyen 10, Akta Pencegahan Dan Pengawalan Penyakit Berjangkit 1988)

A. MAKLUMAT PESAKIT

1. Nama Penuh (HURUF BESAR):

Nama Pengiring (Ibu/Bapa/Penjaga):
(Jika belum mempunyai Kad Pengenalan diri)

2. No. Kad Pengenalan Diri / Dokumen Perjalanan ☐ Sendiri ☐ Pengiring
(Untuk Bukan Warganegara)

No. Daftar Hospital / Klinik ☐☐☐☐☐☐☐☐ Nama Wad:_____ Tarikh Masuk Wad: ☐☐ / ☐☐ / ☐☐☐☐

3. Kewarganegaraan:
Warganegara:
☐ Ya Keturunan:
Sukuketurunan:
(Bagi O/Asli, Pribumi Sabah/Sarawak)
☐ Tidak Negara Asal:
Status Kedatangan: ☐ Izin ☐ Tanpa Izin ☐ Penduduk Tetap

4. Jantina: ☐ Lelaki ☐ Perempuan

5. Tarikh Lahir: ☐☐ / ☐☐ / ☐☐☐☐

6. Umur: ☐☐☐ ☐ Tahun ☐ Bulan ☐ Hari

7. Pekerjaan:_____
(Jika tidak bekerja, nyatakan status diri)

8. No. Telefon: ☐ Rumah ☐ Tel. Bimbit ☐ Pejabat ☐☐☐ - ☐☐☐☐☐☐☐
(Untuk dihubungi)

9. Alamat Kediaman

10. Alamat Tempat Kerja / Belajar:

B. DIAGNOSIS PENYAKIT

☐ 1. Poliomyelitis
☐ 2. Viral Hepatitis A
☐ 3. Viral Hepatitis B
☐ 4. Viral Hepatitis C
☐ 5. Viral Hepatitis *(Others)*
☐ 6. AIDS
☐ 7. Chancroid
☐ 8. Cholera
☐ 9. Dengue Fever
☐ 10. Dengue Haemorrhagic Fever
☐ 11. Diphtheria
☐ 12. Dysentery
☐ 13. Ebola
☐ 14. Food Poisoning
☐ 15. Gonorrhoea
☐ 16. Hand, Food and Mouth Disease
☐ 17. Human Immunodeficiency Virus Infection
☐ 18. Influenza
☐ 19. Leprosy *(Multibacillary)*
☐ 20. Leprosy *(Paucibacillary)*
☐ 21. Leptospirosis
☐ 22. Malaria - *Vivax*
☐ 23. Malaria - *Falciparum*
☐ 24. Malaria - *Malariae*
☐ 25. Malaria - *Others*
☐ 26. Measles
☐ 27. Plague
☐ 28. Rabies
☐ 29. Relapsing Fever
☐ 30. Syphilis - *Congenital*
☐ 31. Syphilis - Acquired
☐ 32. Tetanus Neonatorum
☐ 33. Tetanus *(Others)*
☐ 34. Typhus - *Scrub*
☐ 35. Tuberculosis - *PTB Smear Positive*
☐ 36. Tuberculosis - *PTB Smear Negative*
☐ 37. Tuberculosis - *Extra Pulmonary*
☐ 38. Typhoid - *Salmonella typhi*
☐ 39. Typhoid - *Paratyphoid*
☐ 40. Viral Encephalitis - *Japanese*
☐ 41. Viral Encephalitis - *Nipah*
☐ 42. Viral Encephalitis - *(Others)*
☐ 43. Whooping Cough / Pertussis
☐ 44. Yellow Fever
☐ 45. Others: *please specify:* _____

Selain dari notifikasi bertulis, penyakit berikut perlu dinotifikasi melalui telefon dalam tempoh 24 jam iaitu:- Acute Poliomyelitis, Cholera, Dengue, Diptheria, Ebola, Food Poisoning, Plague, Rabies dan Yellow Fever

11. Cara Pengesanan Kes:
☐ Kes ☐ Kontak ☐ FOMEMA *
☐ Ujian Saringan _____

12. Status Pesakit:
☐ Hidup
☐ Mati ☐☐ - ☐☐ - ☐☐☐☐

13. Tarikh Onset: ☐☐ - ☐☐ - ☐☐☐☐

14. Ujian Makmal:
Nama Ujian: (i)_____
(ii)_____ (iii)_____
Tarikh Sampel Diambil: ☐☐ - ☐☐ - ☐☐☐☐

15. Keputusan Ujian Makmal:
☐ Positif (_____)
☐ Negatif
☐ Belum Siap

16. Status Diagnosis:
☐ Sementara *(Provisional/Suspected)*
☐ Disahkan *(Confirmed)*
Tarikh Diagnosis ☐☐ - ☐☐ - ☐☐☐☐

17. Maklumat Klinikal Yang Relevan:

18. Komen:

C. MAKLUMAT PEMBERITAHU

19. Nama Pengamal Perubatan:

20. Nama Hospital / Klinik dan Alamat:

21. Tarikh Pemberitahuan: ☐☐ - ☐☐ - ☐☐☐☐

.....
Tandatangan
Pengamal Perubatan

Annex 7B

"SCHEDULE
(Regulation 2)
Form
(Regulation 2)
PREVENTION AND CONTROL OF INFECTIOUS DISEASES ACT 1988
PREVENTION AND CONTROL OF INFECTIOUS DISEASES (NOTICE FORM) (AMENDMENT) REGULATIONS 2011

Notification Form: Rev/2010
Serial No:

NOTIFICATION OF COMMUNICABLE DISEASES TO BE REPORTED

(Section 10, Prevention And Control Of Communicable Diseases Act, 1988)

A. PATIENT INFORMATION

1. Full Name (CAPITAL LETTER):

Accompany by(Mother/Father/Guardian):
(If under age/without Identity Card)

2. Identity Card Number / Travelling Document: ☐ Self ☐ Accompany by
(For Non Citizen)

Hospital/Clinic Reg. Number: Ward:_____ Date of Admission: / /

3. Citizenship:
Citizen
☐ Yes Race/Ethnic:
Sub Ethnic:
(For Aborigines, Native of Sabah/Sarawak)
☐ No Country of origin:
Status of Entry: ☐ Legal ☐ Illegal ☐ Permanent Resident

4. Gender: ☐ Male ☐ Female

5. Date of birth: / /

6. Age: ☐ Year ☐ Month ☐ Day

7. Occupation:_____
(If unemployed, please state self reference)

8. Telephone No.: ☐ Resident ☐ H.phone ☐ Office -
(Contact purposes)

9. Current Address:

10. Address of Employer/School/College/University:

B. DISEASE DIAGNOSIS

1. ☐ Poliomyelitis
2. ☐ Viral Hepatitis A
3. ☐ Viral Hepatitis B
4. ☐ Viral Hepatitis C
5. ☐ Viral Hepatitis *(Others)*
6. ☐ AIDS
7. ☐ Chancroid
8. ☐ Cholera
9. ☐ Dengue Fever
10. ☐ Dengue Haemorrhagic Fever
11. ☐ Diphtheria
12. ☐ Dysentery
13. ☐ Ebola
14. ☐ Food Poisoning
15. ☐ Gonorrhoea
16. ☐ Hand, Food and Mouth Disease
17. ☐ Human Immunodeficiency Virus Infection
18. ☐ Influenza
19. ☐ Leprosy *(Multibacillary)*
20. ☐ Leprosy *(Paucibacillary)*
21. ☐ Leptospirosis
22. ☐ Malaria - *Vivax*
23. ☐ Malaria - *Falciparum*
24. ☐ Malaria - *Malariae*
25. ☐ Malaria - *Others*
26. ☐ Measles
27. ☐ Plague
28. ☐ Rabies
29. ☐ Relapsing Fever
30. ☐ Syphilis - *Congenital*
31. ☐ Syphilis - Acquired
32. ☐ Tetanus Neonatorum
33. ☐ Tetanus *(Others)*
34. ☐ Typhus - *Scrub*
35. ☐ Tuberculosis - *PTB Smear Positive*
36. ☐ Tuberculosis - *PTB Smear Negative*
37. ☐ Tuberculosis - *Extra Pulmonary*
38. ☐ Typhoid - *Salmonella typhi*
39. ☐ Typhoid - *Paratyphoid*
40. ☐ Viral Encephalitis - *Japanese*
41. ☐ Viral Encephalitis - *Nipah*
42. ☐ Viral Encephalitis - *(Others)*
43. ☐ Whooping Cough / Pertussis
44. ☐ Yellow Fever
45. ☐ Others: *please specify:* _____

Besides by written notification, the following diseases must be notified by telephone within 24 hours, such as:- Acute Poliomyelitis, Cholera, Dengue, Diptheria, Ebola, Food Poisoning, Plague, Rabies and Yellow Fever.

11. Case detection classification:
☐ Case ☐ Contact ☐ FOMEMA
☐ Screening Test _____

12. Status of patient:
☐ Live/alive
☐ Died - -

13. Date of Onset: - -

14. Laboratory investigation:
Investigation: (i)_____
(ii)_____ (iii)_____
Date of specimen taken: - -

15. Laboratory investigation result:
☐ Positive (_____)
☐ Negative
☐ Pending

16. Diagnosis Status:
☐ Provisional/Suspected
☐ Confirmed
Date of Diagnosis - -

17. Relevant Clinical Information:

18. Comment:

C. NOTIFIER

19. Name of Medical Practitioner:

20. Name and address of Hospital/Clinic:

21. Date of Notification: - -

.....
Signature of Medical Practitioner

'Annex 8'

EVD CHECKLIST

(A) Patient Data:

Name		Date of onset of illness	
Age		Date & time of consultation	
Gender		Home Address	
Nationality			
Identity Card / Passport No.			
Mobile phone no.			

(B) Physician Data:

Name & Address		Mobile phone no.	
		Fax no.	
		E-mail	

(C) Details:

1. Recently arrived from *countries with widespread transmission of EVD:
   **please specify the country:*
2. Details of arrival:
   - Date of arrival: ……
   - Flight number:……
3. Symptoms (please tick the relevant answers to the following questions):

• Fever	YES ( ) NO ( )	• Rashes	YES ( ) NO ( )
• Joint & muscle aches	YES ( ) NO ( )	• Vomiting	YES ( ) NO ( )
• Headache	YES ( ) NO ( )	• Diarrhoea	YES ( ) NO ( )
• Sore throat	YES ( ) NO ( )	• Unexplained bleeding	YES ( ) NO ( )

4. History of exposure during staying in country with widespread transmission of EVD:

• Met, visited, took care or participated in funeral rites of a patient known to have or suspected to have EVD within the last 21 days?	YES ( ) NO ( )
• Been admitted to or worked in a health care facility in those affected countries in the last 21 days?	YES ( ) NO ( )

5. Other information:

(D) Physical examination:

- Temperature: ……^{o}C
- Blood pressure: ……mm/Hg
- Pulse rate: ……/ min

Respiratory rate: ……/ min
Level of consciousness: ……
Others:

(E) Follow-up Actions:

……
……
……

'Annex 9'

SENARAI HOSPITAL DIKENALPASTI *(DESIGNATED HOSPITALS)* BAGI PENGURUSAN PESAKIT DISYAKI DIJANGKITI EVD

BIL	NEGERI	HOSPITAL	ALAMAT DAN NO. TELEFON
1	Perlis	Hospital Tengku Fauziah, Kangar	**Hospital Tengku Fauziah** Jalan Kolam, 01000 Kangar, Perlis Tel : 04-9738000 Fax : 04-9767237
2	Kedah	Hospital Sultanah Bahiyah, Alor Setar	**Hospital Sultanah Bahiyah** KM 6, Jln Langgar, Alor Setar 05460 Alor Setar, Kedah Tel : 04-7406233 Fax : 04-7350233
3		Hospital Langkawi	**Hospital Langkawi** Bukit Tekuh, Jalan Padang Maksirat 07000 Langkawi, Kedah Tel : 04-9665333 Fax : 04-9660121
4	Pulau Pinang	Hospital Pulau Pinang	**Hospital Pulau Pinang** Jalan Residensi 10990 Pulau Pinang Tel : 04-2225333 Fax : 04-2281737
5	Perak	Hospital Raja Permaisuri Bainun, Ipoh	**Hospital Raja Permaisuri Bainun** Jalan Hospital 30400 Ipoh, Perak Tel : 05-2533333 Fax : 05-2531541
6	Selangor & WPKL/Putrajaya	Hospital Sungai Buloh	**Hospital Sungai Buloh** Jalan Hospital 47000 Sungai Buluh, Selangor Tel : 03-61454333 Fax : 03-61454222
7	N. Sembilan	Hospital Tuanku Jaafar, Seremban	**Hospital Tuanku Ja'afar Seremban** Jalan Rasah 70300 Seremban, N. Sembilan Tel : 06-7623333 Fax : 06-7625771
8	Melaka	Hospital Melaka	**Hospital Melaka** Jalan Mufti Haji Khalil Melaka, Melaka 75400 Melaka Tel : 06-2892344 Fax : 06-2841590

BIL	NEGERI	HOSPITAL	ALAMAT & NO TELEFON
9	Johor	Hospital Sultanah Aminah, Johor Bahru	**Hospital Sultanah Aminah** Johor Bahru 80100 Johor Bahru, Johor Tel : 07-2231666 Fax : 07-2242694
10	Pahang	Hospital Tengku Ampuan Afzan, Kuantan	**Hospital Tengku Ampuan Afzan** Jalan Air Putih 25100 Kuantan, Pahang Tel : 09-5133333 Fax : 09-5142712
11	Kelantan	Hospital Tumpat	**Hospital Tumpat** Jalan Kelaburan 62000 Tumpat, Kelantan Tel :09-7263000 Fax: 09-7257082
12		Hospital Tanah Merah	**Hospital Tanah Merah** 17500 Tanah Merah, Kelantan Tel : 09-9545000 Fax : 09-9557929
13	Terengganu	Hospital Sultanah Nur Zahirah, Terengganu	**Hospital Sultanah Nur Zahirah** Jalan Sultan Mahmud, Kuala Terengganu, 20400 Kuala Terengganu, Terengganu Tel : 09-6212121 Fax : 09-6221820/6221739
14	Sabah	Hospital Queen Elizabeth, Kota Kinabalu	**Hospital Queen Elizabeth** Karung Berkunci No.2029 88586 Kota Kinabalu, Sabah Tel : 088-517555 Fax : 088-318605
15		Hospital Duchess of Kent, Sandakan	**Hospital Duchess Of Kent** KM 3.2, Jalan Utara 90000 Sandakan, Sabah Tel : 089-248 600 Talian_Kecemasan:089-255 022 Fax : 089-213 607
16		Hospital Tawau	**Hospital Tawau** Peti Surat 80 Tawau, Sabah 91007 Tawau Sabah Tel : 089-773533 Fax : 089-778626

BIL	NEGERI	HOSPITAL	ALAMAT & NO TELEFON
17	Sarawak	Hospital Umum Sarawak, Kuching	**Hospital Umum Kuching** Jalan Tun Ahmad Zaidi Adruce Kuching, Sarawak 93586 Kuching, Sarawak Tel : 082-276666 Fax : 082-242751
18	Sarawak	Hospital Sibu	**Hospital Sibu** Batu 5 ½, Jalan Ulu Oya 96000 Sibu, Sarawak Tel : 084-343333 Fax : 084-337354
19		Hospital Miri	**Hospital Miri** Jalan Cahaya 98000 Miri, Sarawak Tel : 085-420033 Fax : 085-416514
20		Hospital Bintulu	**Hospital Bintulu** Jalan Nyabau 97000 Bintulu, Sarawak Tel : 086-255899 Fax : 086-255866
21	Wilayah Persekutuan Labuan	Hospital Labuan	**Hospital Labuan** Peti Surat 81006 87020 Labuan, WP Labuan Tel : 087-423922/ 423919 Fax : 087-423928

'Annex 10'

PROTOCOL FOR DESIGNATED AMBULANCE TO TRANSPORT A PERSON UNDER INVESTIGATION (PUI) FOR EVD

PREPARATION OF THE AMBULANCE

- It is advisable to have a dedicated ambulance for transport of suspected cases.
- All non-essential items in the ambulance are to be removed e.g. splints, spinal board.
- Lockers and exposed attachments are to be covered with plastic for easy cleaning and decontamination.
- Spillage kit should be kept in the ambulance in case of blood or vomitus spillage.
- Sharp bin and clinical waste bin should also be kept in the ambulance.
- The place where the patient sits or lie down i.e. stretcher or chair should be covered with a disposal bed sheet. Patient must be straps onto the stretcher or wear the seat belt.
- Only one patient to be ferried by the ambulance at any one time.
- There should be a dedicated medical bag with only essential equipment (individually wrapped) for the number of patients to be ferried by the ambulance.

PREPARATION OF STAFF

- All staff accompanying patient and ambulance driver must wear the recommended PPE.
- Staff is recommended to wear the surgical scrubs instead of uniform before donning the PPE.
- Do not perform any procedures on the patient unless absolutely necessary. Ask for medical advice.
- Unless the patient is unstable, staff accompanying the patient should not sit together with the patient being transported.
- While being transported, the accompanying staff should be in contact with the referral hospital to inform on estimated time of arrival and the patient's clinical condition; in particular whether the patient is stable for the transfer and whether the patient has any uncontained secretions (bleeding, bruising, vomiting and diarrhea).

PREPARATION OF PATIENT

- For stable patients ("dry")
  - Give the patient a vomit bag and tissue.
  - Consider giving oral metoclopromide if patient is prone to motion sickness.

- For "unstable" patients (vomiting, diarrheoa, bleeding)
  - Put on diapers to patient if patient is having diarrheoa.

- IV metoclopromide in vomiting patients.
- If bleeding for further discussion with Emergency Physician is required prior to transfer.
- Consider sedating aggressive patients or using manual restrain.
- All the above procedures to be carried out prior to putting the patients in the ambulance.

DECONTAMINATION

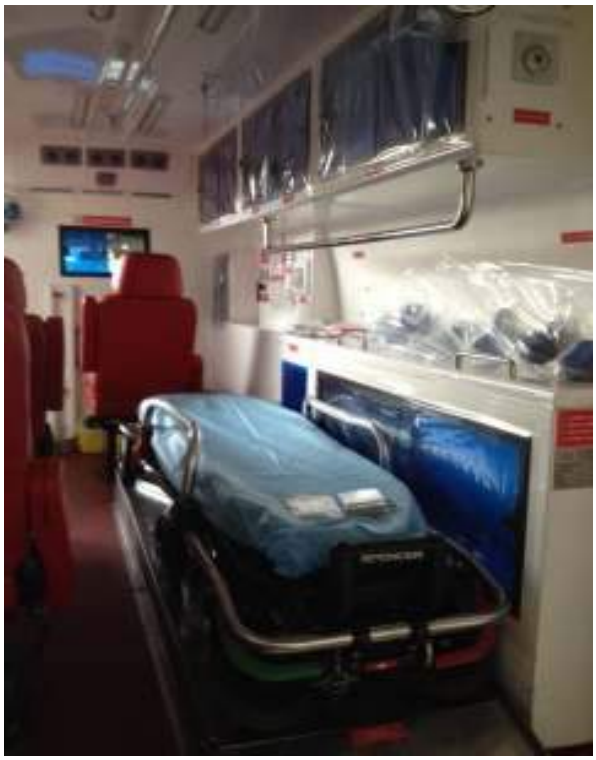
- If spillage occurs in the ambulance
  - Use Chlorine granules in the spillage kit to absorb the spill.
  - After 2 minutes or when the granules crystallize, cover the spillage with the absorbent material e.g. tissue or blue sheet.
  - Do not remove the spill while the patient or staff is in the ambulance. The decontamination of the spillage is to be done at the designated hospital.

- Decontamination of the ambulance
  - The ambulance are to be decontaminated at the designated hospitals only.
  - Decontamination agent to be used as per recommendation.

DISINFECTION OF REUSABLE UTENSILS & DISPOSAL OF WASTE

- All reusable patient care utensils should be put into the appropriate biohazard receptacles and labelled for cleaning and disinfecting later.
- All waste disposal from the affected patient should follow guidelines of Clinical Waste Management **Annex 19.**

PREPARATION OF THE DESIGNATED AMBULANCE



Lockers and exposed attachments are to be covered with plastic for easy cleaning and decontamination

SPILLAGE KIT IN THE DESIGNATED AMBULANCE

SPILLAGE KIT

- 2 underpad blue sheet to be added to the standard kit
- To be used to cover over the spill after scattering the chlorine granules

CONTENTS OF THE SPILLAGE KIT

- gloves
- absorbent material
- high absorbency disinfection granules
- scoop & scraper
- clinical waste bag & seal
- 2 underpad blue sheet
- alcohol wipe
- illustrated instruction sheet

'Annex 11'

DEDICATED TEAM FOR THE MANAGEMENT OF EVD PATIENTS

- It is strongly advised to identify and form dedicated teams to manage suspects in designated hospitals

- This will reduce the chance of lapses in infection control. It is also easier to train a smaller group and monitor their subsequent health

- Dedicated teams consist of doctors, nurses and cleaners

- Staff with significant underlying conditions (e.g. pregnancy) are to be excluded

- A log of all health care workers accessing the patients rooms should be kept

- Surveillance of Health Care Workers

    - All health care workers caring for patients with confirmed Ebola should have their temperatures monitored daily for a period of 21 days

    - This is best coordinated by a supervisor with contact details of the staff

    - Staff should be aware of the symptoms of Ebola and have a clear and easy reporting mechanism should fever or any symptom suggestive of Ebola emerge within the 21 days

‘Annex 12’

DEDICATED ISOLATION ROOM FOR THE MANAGEMENT OF EVD PATIENTS

- Patients are to be nursed in single rooms with closed doors and an ensuite bathroom
- The presence of an anteroom is preferable
- No special ventilation requirements are necessary
- Rooms are to be devoid of unnecessary items and furniture and any essential furniture should have hard surfaces that are easily wiped down
- Flooring should not be carpeted and be able to withstand repeated bleaching
- Access to these areas should be restricted to only trained health care personnel
- Dedicated access route from A&E to isolation room should be planned beforehand and includes dedicated lifts (if applicable) and measures to decontaminate them
- Visitors should not be allowed or limited to only those absolutely necessary for the patient’s well-being (e.g. a child’s parent)
- Each room should have a dedicated separate set of medical equipment
- Security of these isolation areas would need to be optimized to prevent unwarranted entry into and exits from isolation

'Annex 13'

INTENSIVE CARE MANAGEMENT FOR EBOLA VIRAL DISEASE

- For the hospitals which have no isolation facilities in the existing intensive care units for management of highly infectious patients, EVD patients who need intensive care shall be cared for and managed in the designated isolation rooms/ ward identified in the individual hospital

- Staff nurses from the intensive care unit shall be deployed to nurse patients who are mechanically ventilated. This is to minimize exposure to staff who have less experience in nursing ventilated patients

- Standard precautions as well as infection prevention and control recommendations by the Ministry of Health shall be adhered to

INFECTION CONTROL MEASURES FOR AEROSOL-GENERATING PROCEDURES

(Aerosol-generating procedures: include intubation, nasopharyngeal aspiration, tracheal suctioning, tracheostomy care, chest physiotherapy, bronchoscopy, nebulizer therapy).

- Avoid or minimize the performance of aerosol-generating procedures without compromising patient care. Only those healthcare workers needed to perform the procedure shall be present

- In addition to N95 masks, eye protection (goggles and full-face shield/visor) shall be worn to prevent eye contact with infectious material during such procedures

- Disposable respiratory equipment shall be used wherever possible. Reusable equipment shall be disinfected in accordance with local policy and manufacturers guidelines

- For non-intubated patients requiring oxygen therapy, non-humidified oxygen can be delivered via nasal prongs or simple facemask. Do not use bubble-through water humidification

- Ventilators shall be identified only for use for patients with Ebola Viral Disease

- All ventilators shall be fitted with 2 viral filters; a filter is to be placed between the distal end of expiratory tubing and the ventilator (to prevent contamination) while another filter is to be placed at the exhalation outlet of the ventilator (to minimise contamination to the environment)

- Use disposable ventilatory breathing circuit. The ventilatory circuit shall not be “broken” unless absolutely necessary. Do not change ventilatory circuits on a routine basis. Ventilators shall be put on standby mode or turned off if there is a need to break the circuit.

- Use closed suctioning systems. Do not disconnect from ventilator and manually ventilate during suctioning. Instead administer 100% oxygen on the ventilator during suctioning.

- Water humidification shall not be used. Use combination of heat moisture exchanger with viral filter. It is to be placed at the Y-piece of the breathing circuit.

- Avoid the use of nebulizers. For intubated patients, use metered dose inhalers if necessary

- When using a manual resuscitator bag, connect a viral filter between the endotracheal tube and the manual resuscitator bag

- Consider paralyzing patient during bronchoscopy to minimize coughing

- Do not attempt insertion of nasogastric tube in a non-intubated patient unless absolutely necessary

- The use of non-invasive positive pressure ventilation is strongly discouraged

- Adhere to the following infection control measures during intubation:
  - whenever possible, only experienced doctors shall attempt intubation (spread of infection at the time of intubation appears to be associated with difficult intubation, prolonged manual bagging) .
  - rapid sequence induction shall be practiced during intubation. Avoid awake intubation. Ensure the patient is adequately paralyzed before attempting laryngoscopy.
  - a viral filter shall be fitted between the facemask and manual resuscitator bag.
  - minimize manual ventilation. If essential, it shall be carried out by two personnel: one holds the mask tightly against patient's face while the other squeezes the bag gently.
  - inflate ETT cuff before ventilating the patient.
  - turn on the ventilator only when it is connected to the endotracheal tube.

'Annex 14'

INFECTION PREVENTION AND CONTROL

A) PATIENT CARE

- The main strategy in containing the spread of Ebola is through meticulous adherence to and application of standard, contact and droplet precautions at all times
- If a patient is admitted, he/she must be taken to the dedicated isolation room/ward via a route identified only for these patients
- Nursing protocols need to be modified to ensure adherence to infection control practices but not compromising care (e.g. simultaneously taking vital signs, serving meals, and medications at the same instance)
- PUI and probable cases as well as contacts should not to be nursed next to each other
- Visitors, if allowed should be kept to a minimum. They should be issued with personal protective equipment (PPE) and supervised
- All non –essential staff (including students) should not be allowed into the unit / ward
- Movement of patients outside of the isolation unit should be avoided
- Avoid aerosol-generating procedures if possible
- Wear a respirator (FFP2 or EN certified equivalent or US NIOSH-certified N95), if any procedures that stimulate coughing or promote the generation of aerosols (e.g., aerosolized or nebulized medication administration, diagnostic sputum induction, bronchoscopy, airway suctioning, endotracheal intubation, positive pressure ventilation via face mask) is planned to be performed
- Limit injections and phlebotomy procedures to the absolute necessary and ensure proper disposal of sharps. Use safety devices and closed blood taking circuits for all venesections and settings of cannulas to avoid any untoward needle stick injury
- Ensure that puncture-resistant containers for sharps objects are placed as close as possible to the immediate area where the objects are being used ('point of use') to limit the distance between use and disposal
- Taking clinical samples for laboratory testing (refer **Annex 16**)
- Disposable crockery and cutlery should be used where possible. These items should be disposed of as category A waste.
- Anything that falls on to the floor in the isolation rooms should be discarded unless the material is very important then it should be decontaminated

B) PERSONAL PROTECTIVE EQUIPMENT

- Change to scrubs upon entry to isolation area
- Before entering the isolation rooms/areas, wear PPE in dedicated changing area according to the sequence illustrated in **Annex 15**
- Personal Protective Equipment (PPE) should be worn by all staff and visitors accessing the isolation unit
- The basic PPE needed in all situations should be :
    - Gloves
    - Disposable, impermeable full sleeve gown (fluid repellent)
    - Overlying plastic apron
    - Surgical mask
    - Eye protection (eye visor, face shield or googles)
    - Cap, head cover
    - Footwear (Closed, puncture and fluid resistant shoes)
- Consider changing gloves if heavily soiled with blood or any body fluids while providing care to the same patient (perform careful hand hygiene immediately after removal)
- Always change gloves and perform hand hygiene immediately after removal
- If boots are not available, shoe cover should be used but these must be removed while still wearing gloves and with caution to avoid hand contamination
- Before exiting the isolation room/area, carefully remove and dispose of PPE into waste containers and perform hand hygiene
- When removing PPE, be careful to avoid any contact between the soiled items (e.g. gloves, gowns) and any area of the face (i.e. eyes, nose or mouth) or non-intact skin
- Gowning and degowning of PPEs should be done in pairs of supervised to ensure that it is done correctly
- Reminders in the form of regular training and posters in the dedicated changing area is highly recommended.

C) ENVIRONMENT

- Use basic PPEs when doing mopping and cleaning of walls and floors when they are not visibly soiled.
- Use the additional PPE when undertaking cleaning activities with increased risk of splashes or in which contact with blood and body fluids is anticipated (e.g., cleaning surfaces heavily soiled with vomit or blood or cleaning areas closer than 1 meter/3 feet from a patient with symptoms like diarrhoea, bleeding or vomiting, etc.)

- Environmental surfaces or objects contaminated with blood, other body fluids, secretions or excretions should be cleaned and disinfected as soon as possible using standard hospital detergents/disinfectants
- Application of disinfectants should be preceded by cleaning to prevent inactivation of disinfectants by organic matter
- This should be done by covering the spills with absorbent paper towels, liberally sprinkling with chlorite granules (eg stabilised chlorine biospill absorbent) and left for a minimum of 2 minutes before being wiped up. Discard the towels into yellow bins, and then the area should be cleaned again with 10,000 ppm. (1%)
- For general cleaning of surfaces and equipment not contaminated with blood or bodily fluids – use wipe downs containing 1,000 ppm (0.1%) hypochlorite solution
- Prepare cleaning and disinfectant solutions every day. Change cleaning solutions and refresh equipment frequently while being used during the day, as they will get contaminated quickly.
- Clean floors and horizontal work surfaces at least once a day with clean water and detergent. Cleaning with a moistened cloth helps to avoid contaminating the air and other surfaces with air-borne particles
- Allow surfaces to dry naturally before using them again
- Dry sweeping with a broom should never be done. Rags holding dust should not be shaken out and surfaces should not be cleaned with dry rags
- Cleaning should always be carried out from “clean” areas to “dirty” areas, in order to avoid contaminant transfer
- Do not spray (i.e. fog) occupied or unoccupied clinical areas with disinfectant. This is a potentially dangerous practice that has no proven disease control benefit.

D) PATIENT CARE EQUIPMENT

- Ebola virus been known to survive for two weeks or even longer on contaminated fabrics and equipment. Staff should ensure that equipment used are decontaminated and cleaned following the procedures
- Disposable equipment should be used wherever possible in the treatment and care of patients with EVD and disposed of appropriately. If devices are to be reused, they should be sterilized in accordance with manufacturer’s instruction. Surfaces should be cleaned with broad spectrum disinfectants of proven antiviral activity like sodium hypoclorite 1,000 ppm (0.1%)
- Use plastic protective seal to cover the reusable equipment wherever possible to avoid contamination of the equipment with bodily fluids/ spills
- Decontamination and cleaning must be conducted wearing appropriate PPE.

- Unless visibly soiled, wipe downs containing 1,000 ppm hypochlorite solution (0.1%) is appropriate.

E) MANAGEMENT OF LINEN

- Linen that has been used on patients can be heavily contaminated with body fluids (e.g. blood, vomitus) and splashes may result during handling
- When handling soiled linen from patients, use gloves, gown, closed shoes (e.g. boots) and facial protection (mask and goggle or face shield)
- Washing contaminated linen by hand is disallowed
- Refer **Annex 18** for Linen Management

F) WASTE MANAGEMENT

- Wear heavy duty/rubber gloves, impermeable gown, closed shoes (e.g. boots) and facial protection (mask and goggle or face shield), when handling infectious waste (e.g. solid waste or any secretion or excretion with visible blood even if it originated from a normally sterile body cavity)
- Avoid splashing when disposing of liquid infectious waste.
- Refer **Annex 19** for Waste Management

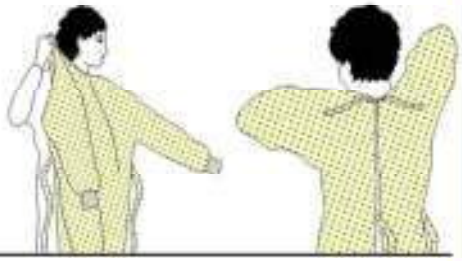
DONNING & REMOVING PERSONAL PROTECTIVE EQUIPMENTS (PPEs)

SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. GOWN

- Fully cover torso from neck to knees, arms to end of wrists and wrap around the back
- Fasten in back of neck and waist



2. MASK OR RESPIRATOR

- Secure ties or elastic bands at middle of head and neck
- Fit flexible band to nose bridge
- Fit snug to face and below chin
- Fit-check respirator

3. GOOGLES OR FACE SHIELD

- Place over face and eyes and adjust to fit

4. GLOVES

- Extend to cover wrist of isolation gown

USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION

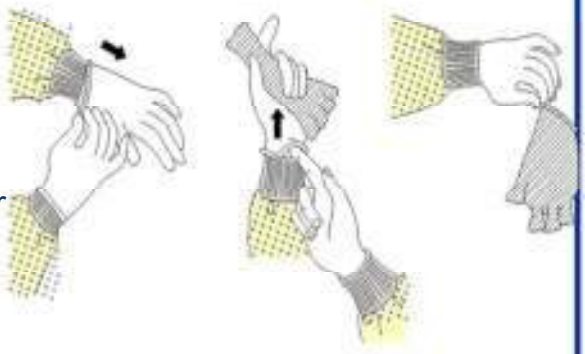
- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene

SEQUENCE FOR REMOVING PERSONAL PROTECTIVE EQUIPMENT

Except for respirator, remove PPE at doorway or in anteroom. Remove respirator after leaving patient room and closing door.

1. GLOVES

- Outside of gloves is contaminated!
- Grasp outside of glove with opposite gloved hand; peel off
- Hold removed glove in gloved hand
- Slide fingers of ungloved hand under remaining glove at wrist
- Peel glove off over first glovet
- Discard gloves in waste container



2. GOOGLES OR FACE SHIELD

- Outside of googles or face is contaminated!
- To remove, handle by head band or ear pieces
- Place in designated receptacle for reprocessing or in waste container

3. GOWN

- Gown front and sleeves are contaminated!
- Unfasten ties
- Pull away from neck and shoulder, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle and discard

4. MASK OR RESPIRATOR

- Front of mask / respirator is contaminated – **DO NOT TOUCH!**
- Grasp bottom, then top ties or elastics and remove
- Discard in waste container

Perform Hand Hygiene Between Steps If Hands Become Contaminated And Immediately After Removing All PPE

'Annex 16'

GUIDELINES FOR PATHOLOGY LABORATORIES IN MANAGEMENT OF PUI FOR EVD

CONTENTS

1. INTRODUCTION

Ebola virus disease (EVD) is one of the viral haemorrhagic fevers (VHF) receiving international attention for its control. It is a risk group 4 pathogen requiring Biosafety level 3 laboratory practices for non-virus isolation procedures. Body secretions and excretions, blood, semen and tissue specimens from infected patients contain infectious material. It is evident that the risk of infection increases with clinical progression of disease. If a case presented in our health care facility, nosocomial transmission and/or laboratory acquired infection is most likely to occur through either direct or indirect contact with the blood and/or secretions of an infected patient if the managing health care worker does not adhere to recommended infection control measures (refer to MOH guidelines on EVD management). Because of the high mortality associated with the disease, it is agreed nationally that laboratory testing should be the minimum necessary for diagnostic evaluation and patient care. Only specimens essential for diagnosis and monitoring should be obtained following consultation and discussion of the infectious disease physician with the designated laboratory personnel.

To minimize exposure and considering this is a very hazardous pathogen with limitations of facilities, expertise, budget and logistic, 1 main DPL, 5 regional DPLs and at least 13 DPLs have been identified for handling non-viral specific laboratory (rRT-PCR for Ebola Virus) investigations of PUI for EVD (Refer to **Table 1**).

However, the other pathology departments in other hospitals where patients are admitted, a contingency plan to provide basic laboratory investigations must be in place to ensure patient care is not compromised.

TABLE 1: **DESIGNATED PATHOLOGY LABORATORIES (DPL) IN MOH MALAYSIA**

CATEGORY	NO	HOSPITAL WITH DPL	COVERAGE
MAIN DPL	1	Hospital Sungai Buloh, Selangor	• WP Kuala Lumpur • WP Putrajaya • Selangor
5 REGIONAL DPLs	2	Hospital Pulau Pinang	• Pulau Pinang
	3	Hospital Tumpat, Kelantan	• Kelantan
	4	Hospital Sultanah Aminah, Johor Bahru	• Johor
	5	Hospital Queen Elizabeth, Kota Kinabalu	• Sabah • WP Labuan
	6	Hospital Umum Sarawak, Kuching	• Sarawak
13 OTHER DPLs	7	Hospital Tengku Fauziah, Kangar	• Perlis
	8	Hospital Sultanah Bahiyah, Alor Setar	• Kedah
	9	Hospital Raja Permaisuri Bainun, Ipoh	• Perak
	10	Hospital Tuanku Jaafar, Seremban	• Negeri Sembilan
	11	Hospital Melaka	• Melaka
	12	Hospital Tengku Ampuan Afzan, Kuantan	• Pahang
	13	Hospital Sultanah Nur Zahirah, Terengganu	• Terengganu
	14	Hospital Duchess of Kent, Sandakan	• Sabah
	15	Hospital Tawau	
	16	Hospital Sibu	• Sarawak
	17	Hospital Miri	
	18	Hospital Bintulu	
	19	Hospital Labuan	• Labuan

2. DESIGNATED PATHOLOGY LABORATORY (DPL)

DPL will function for both pre analytical virus inactivation (where applicable) in the clinical specimen and subsequent testing.

- Minimum requirement for DPL :
    - Estimated about 200 sqf (14 x 14 ft)
    - The room must be physically separated from other areas by a door, preferably double door access
    - The room must be able to be sealed or there are other mechanisms for decontamination.
    - The room must contain at least one Class 2 Bio Safety Cabinet (BSC 2), a laboratory sink, a hand washing sink and a refrigerator.
    - A thermal block may be required for virus inactivation if the procedures do not affect the analyte to be tested.
    - All equipment for specimen processing must either be located within BSC 2 or employ only within DPL. Other equipment should be removed if possible.
    - Equipment used in the DPL must be dedicated to that room and cannot be moved to other areas without undergoing decontamination.
    - The laboratory door must be closed at all times and have a sign affixed stating: “TESTING OF HIGHLY INFECTIOUS SAMPLES. DO NOT ENTER”.
    - The laboratory must be locked when not in use and the key held by the staff responsible for that area. Other designated personnel may hold spare keys.
    - It is preferable that the laboratory has its own portable autoclave or one autoclave located nearby.
    - It is preferable that the laboratory has an attached shower and changing room.

- Room ventilation **must not** be using centralised air-conditioning system

- Test procedures which needs centrifugation will generate aerosols and **should be avoided**

3. LABORATORY PERSONNEL

Personnel involved in handling laboratory specimens must be kept to a minimum. It is preferred that senior staffs are designated to process these samples. These trained and competent laboratory personnel for safe handling of specimens from reception till disposal will be put on roster to work within the designated reception and testing area.

- Pregnant or immunocompromised staffs are to be excluded.

- To ensure their safety, infection control measures, pre and post surveillance measures will be implemented. Full protective clothing consists of gloves; impervious long-sleeve gowns, shoe covers, N95 masks and a face shield must be worn. Disposable overalls should be used under the impervious long-sleeve gowns. The face shield is unnecessary if working in a BSC 2.

- A written record of all personnel involved in laboratory testing must be kept to record dates, times and analyses performed for each person. A logbook will be placed in the laboratory for use by all staff handling specimens. This will be the responsibility of the appointed senior laboratory personnel in each area.

- 10 mls of clotted blood must be collected from staff handling specimens from suspected EVD patients which will be stored in Virology for baseline serology.

- Laboratory personnel accidentally exposed to potentially infected material (e.g. through injections, cuts or abrasions on the hands) should immediately:

    - wash the infected part with soap and water and apply a disinfectant solution e.g. 70% (w/v) alcohol. If infected material is accidentally splashed into the eyes, wash thoroughly with eye wash solution provided. Refer to ***Appendix 1***: ***Management of Laboratory Personnel Accidentally Exposed to Potentially Infectious Material.***
    - notify Pathologist/Scientific Officer or in charge and the Department Safety Officer.
    - complete an incident report
    - considered the person as a high-risk contact and given post-exposure surveillance

- Do not use any other disinfectants. In case of heavy contamination of clothing, the contaminated clothing must be discarded in the laboratory and the person should shower immediately.

- A **checklist** as given in **Appendix 8** is prepared to guide the designated laboratory in EVD preparedness.

4. LABORATORY DIAGNOSIS

- The specific test for diagnosis of EVD is currently viral genome detection by polymerase chain reaction (rRT-PCR) and currently performed by the Virology Division, Institute of Medical Research. Blood collected in serum collector tube need to be triple packaged and transported at ambient temperature and not in ice.

- Experience has shown that most ill patients suspected of EVD are suffering from malaria. Laboratory tests to exclude or confirm malaria should be undertaken as

soon as possible. Malaria is a serious infection which can be life threatening: prompt treatment can significantly affect the course of disease.

- Other relatively common causes of febrile illness in travellers returning from Africa include dengue, typhoid fever, rickettsia infections and tropical parasites (refer **Table 2**). However, investigations to rule out these diagnoses **except malaria, dengue and leptospirosis** (if necessary) should only be done after EVD is excluded.

- Multiple infections are not uncommon in the tropics and the finding of malarial parasites does not absolutely exclude one of the haemorrhagic fevers or other serious infections.

- To minimise exposure to EVD, only limited range of test is offered in DPL – refer to **Table3**.

Table 2: Differential Diagnosis of Viral Hemorrhagic Fever (VHF)

Pathogen	**Diseases**
Parasites	Malaria, Helminths: Schistosomiasis, Katayama syndrome
Viruses	Dengue infection, Yellow Fever, Rift Valley Fever, Infectious mononucleosis, Hepatitis, HIV
Bacteria	Leptospirosis, Typhoid, Pyelonephritis, Pneumonia, Sepsis, Meningococcal disease, Rickettsia: Typhus, Q Fever, Tick-borne rickettsiosis
Protozoa:	Amoebic liver abscess

Table 3: List of Tests in DPL

Tests	Method	Container	Specimen Volume	Transport Time To Ensure Specimen Integrity
Full blood count: Total White Cell Count Haemoglobin Platelet Count Haematocrit	Automated cell count (Closed cap piercing system)	EDTA	2 ml	4 hours
Malaria	1. Rapid test 2. BFMP (stained if EVD negative)	EDTA	2 ml	2 hours
Dengue (NS1, IgG, IgM	Rapid test	Plain tube with gel separator	2 ml	4 hours
Arterial/venous blood gases: pH pO_2 pCO_2 $HC0_3$ **BUSE, Creatinine, Glucose and Lactate:** Sodium Potassium Chloride Glucose Lactate Urea Creatinine	Thin film Biosensors (Rapid test)	Whole blood in heparinised syringe in ice	1 ml	As soon as possible (less than 1 hour)

***Temperature of the specimens for transportation must be maintained between 2-8^{o}C EXCEPT for EVD rRT-PCR (do not put ice in specimen can reach the testing laboratory within 8 hours)**

Pre-analytical examination procedures

- Following specimen reception at DPL, record all received samples.

- Specimen inactivation procedures may need to be carried out to reduce virus load. Refer to **Appendix 2: General Procedure For Inactivation Of Samples**.

Analytical procedures

- Perform tests as documented in the specific tests which are safe to be performed.

- All Rapid Test Kit procedure should be performed in BSC 2.

- Analysis of sample which must be centrifuged prior to testing should be avoided and delayed till EVD rRT-PCR result is available and EVD has been excluded. If required, may need to arrange for centrifugation to be done within a BSL 3 laboratory.

Post analytical procedures

- On completion, ensure work surface and equipment disinfection is carried out. Refer **cleaning and decontamination of laboratory facilities and equipment**.

- Proper waste disposal must be carried out to prevent contamination and transmission of virus to the environment outside the laboratory. Refer **clinical waste disposal**.

- **NO SPECIMEN RETENTION because of hazardous nature of specimen and potential risk to the staff.**

Reporting

- Result shall be made available to the requesting physician in a timely manner.

- The EVD rRT-PCR result will be made available to requesting physician and DPL/designated pathology laboratories.

- Reporting procedures as instructed by department, hospital, state and national level shall be adhered.

- LTAT for test in DPL: 2-4 hours.
  LTAT for EVD rRT-PCR : 8 -72 hours.

5. SPECIMEN COLLECTION AND TRANSPORTATION

- It is very important that before a specimen is collected both for EVD specific virology test and other microbiology, chemical pathology and haematology tests, an Infectious Disease physician or identified clinician is consulted. Prior to specimen collection, the pathologist in charge of the DPL must be informed to ensure proper collection and transportation of specimens.

- The relevant people in designated laboratories need to be informed and discussed, if necessary on the safe handling of the specimens. (refer **Appendix 3, Appendix 4** and **Appendix 9.** This to allow the laboratory to plan for specimen processing. For EVD non-viral specific tests, it is best that only tests that are necessary for patient intervention and are safe to be performed by the designated laboratory are requested. To ensure this, consultation to the relevant senior pathologist(s) may be needed.

- The request form should be completed and never be placed in the same container as the specimen, nor should it be attached with pins or staples. The request form together with the despatch list to the designated laboratories should not be brought into the patient area and should be placed outside the tertiary container.

- Specimen collection and transportation guidelines endorsed for the EVD specific virology testing laboratory (EVD rRT-PCR test) need to be adhered to. Refer **Appendix 5** and **Appendix 6**.

- Prior arrangement needs to be made to ensure specimens are never left unattended and there is no delay in transportation. Specimens must not be sent by any automatic transport system (e.g. pneumatic tubes). For hospital without DPL, triple packaged specimens shall be collected by laboratory staff from ward and immediately brought to designated transport.

- Designated route for specimen transportation within the hospital and to the referral DPL and IMR should be identified to minimise exposure to health care workers and the publics.

- Designated ambulance/ transport shall be identified and arranged by laboratory staff for specimen transportation. This specimen should be accompanied by dedicated laboratory staff.

- Local arrangement need to be in place to ensure safe and timely transport of specimens within and interstate, especially for Sabah and Sarawak.

6. CLEANING AND DECONTAMINATION OF LABORATORY FACILITIES AND EQUIPMENT

- Abundant supplies of disinfectants must be available, i.e. 1 % sodium hypochlorite and 70% (w/v) alcohol. These should be prepared fresh daily. Disinfectants, eye wash solution and hand wash solutions (Chlorhexidine in alcohol) must be available.

- Accidental spills of potentially contaminated material should be covered with an incontinence pad saturated with 1% hypochlorite, left to soak 30 minutes, and then wiped up with absorbent material soaked in 1% hypochlorite solution. The waste should be placed in a biohazard bag. With the help of an assistant, this bag should be placed inside another biohazard bag and sealed with tape for disposal.

- If accidental spills of potentially contaminated material result in aerosol formation (e.g. major spills outside a class 1, 2 or 3 BSC), evacuate the laboratory immediately for 1 hour and proceed as in 2 above.

- BSC's must be cleaned after spills, and at the completion of work with potential EVD samples. Spills must be dealt with as in (2) above. The BSC should then be wiped over with 1% hypochlorite which is left 10 minutes. Hypochlorite will need to be wiped off to reduce corrosion.

- Automated analysers should be decontaminated with 1% hypochlorite for several cycles and the external surfaces wiped over with 1% hypochlorite. If the manufacturers recommend an alternative decontamination procedure, then it must be verified that it is adequate to inactivate the virus. If the process is known to be sufficient for the inactivation of hepatitis C and/or hepatitis B virus, then it will be adequate for the viruses causing VHFs.

- In the absence of any suitable internal disinfection procedure, the machine may be put back into routine use once a large number of uninfected samples, or an equivalent volume of a fluid such as saline, have been processed through it. As a suggestion, at least 20 uninfected samples should be passed through the machine prior to its return to routine use.

- Racks used to carry specimens must be placed in a plastic bag after use and sealed. This bag should be placed inside another bag and the outside must be wiped over with 1% sodium hypochlorite. The bag should be clearly marked with the nature of the contents.

7. CLINICAL WASTE DISPOSAL

- **Used PPE**

  - Gloves, mask, gown, cap and overalls must be placed in a biohazard bag in the laboratory and immediately sealed for disposal. If any of the clothing was contaminated by potentially infectious material then, with the help of an assistant, the first bag should be placed inside another biohazard bag and sealed with tape. The outside of the bag must be decontaminated with 1 % hypochlorite before leaving the laboratory.

  - Face shield should be immersed in 1 % hypochlorite for 10 minutes, washed and dried for re-use if they are contaminated or at the end of each shift in which they have been used.

  - Contaminated overalls must be discarded before leaving the laboratory as in above.

- **Potentially contaminated fluids** must either be autoclaved prior to leaving the area or they must be discarded into a container that contains sufficient sodium hypochlorite to produce a final concentration of at least 1% when the container is full. The container can be emptied into the sewerage system provided there has been at least 10 minutes contact time with the hypochlorite. These must then be placed in a rigid container for subsequent autoclaving and finally disposed by the concession company.

- **All patient specimens, materials used for processing samples and all contaminated glassware or equipment** must be placed in puncture proof containers. The container must be placed in a plastic bag, sealed and the outside must be wiped over with 1 % sodium hypochlorite. The bag should be clearly marked with the nature of the contents and indicate that they are for disposal.

- **Reusable items** that cannot be autoclaved must be placed in puncture proof containers. The container must be placed in a plastic bag, sealed and the outside must be wiped over with 1 % sodium hypochlorite. The bag should be clearly marked with the nature of the contents and indicate that they are for re-use.

- **Disposable sharps** must be placed in a puncture-proof approved sharps container. When full the container must be placed in a plastic bag, sealed and the outside must be wiped over with 1 % sodium hypochlorite. The bag should be clearly marked with the nature of the contents and indicate that they are for disposal.

- **General laboratory waste** must be placed in waterproof bags, then placed in a plastic bag, sealed and the outside must be wiped over with 1 % sodium hypochlorite. The bag should be clearly marked with the nature of the contents and indicate that they are for disposal.

- **Potentially contaminated drainage from haematology analyser process blood, serum or other body fluids** must either pass into the sewerage system via a sealed drainage system or it must pass into a container via a sealed drainage system. In the latter case, the container should contain sufficient sodium hypochlorite to produce a final concentration of at least 1% when the container is full. The container can be emptied into the sewerage system provided the waste has had a minimum contact time with the hypochlorite of 10 minutes.

- Refer **Annex 19** for details on waste management.

8. TRAINING

- A group of trained and competent laboratory personnel need to be identified. This is to ensure safe handling of specimens from reception till disposal.

- Staff working in this area must have sufficient skills to carry out the processing of the specimen.

- It is the responsibility of the Pathologist of the DPL to ensure that trained staffs adhere to the instructions provided in the guideline

9. LIST OF APPENDICES

Appendix	Titles
1.	Management of Laboratory Personnel Accidentally Exposed to Potentially Infectious Material
2.	General Procedure for Inactivation of Samples
3.	Flowchart for Handling Specimens of PUI for EVD in Designated Pathology Laboratory (DPL)
4.	Flowchart for specimen collection, packaging and transport for specimen of PUI for EVD in Designated Pathology Laboratory (DPL)
5.	Flow chart of specimen collection and transport for confirmatory test of Ebola Virus Disease in Institute for Medical Research (IMR)
6.	Specimen collection for confirmatory test of Ebola Virus Disease – **The Do and Don't**
7.	Procedure for inactivation of blood smears for malaria parasite examination
8.	Check list for EVD designated Pathology Department preparedness
9.	How to safely transport human blood samples of PUI for Ebola Virus Disease in-country by road, rail and sea
10.	Contact details of Pathologists nationwide

APPENDIX 1

MANAGEMENT OF LABORATORY PERSONNEL ACCIDENTALLY EXPOSED TO POTENTIALLY INFECTIOUS MATERIAL

- This includes all staff members who have had exposure to blood or body fluids from proven or suspected cases.

- Significant exposures are needle sticks, contact with mucous membranes (eyes, mouth or nose) or contact with broken skin.

- The incident must be reported and the exposed laboratory personnel referred urgently to the Clinical Microbiologist and/or Safety Officer or Infectious Diseases Physician.

- The exposed individual must report daily and have their temperature monitored daily. If the person becomes unwell or develops fever, then they require urgent review by the Infectious Diseases Physician.

APPENDIX 2

GENERAL PROCEDURE FOR INACTIVATION OF SAMPLES

The following methods are suitable for producing acceptable reduction of infectivity in order to allow processing of samples using standard (BSL 2) laboratory precautions:

1. **Heating at 60^{o}C for 60 minutes for serum samples or other body fluids**

    - This method does not significantly affect estimations of sodium, potassium, magnesium, urea, urate, creatinine, bilirubin, glucose and C-reactive protein.
    - Other test showed some variation, while enzymes such as alkaline phosphatase, alanine aminotransferase, gamma-glutamyltransferase and creatinine kinase were inactivated.
    - This temperature is liable to coagulate IgG and invalidate serological tests.
    - Based on experience with other viruses, laboratories may elect to use 57^{o}C for 60 minutes to provide sufficient viral inactivation.

2. **Sample treatment with 10 µl of 10% Triton X-100 per ml of fluid for 1 hour is recommended by the World Health Organization to reduce titres of virus in serum**

    - As this is a detergent, it may affect the performance of tests, particularly where preservation of cells is important.
    - Therefore, inactivation only possible post analysis.

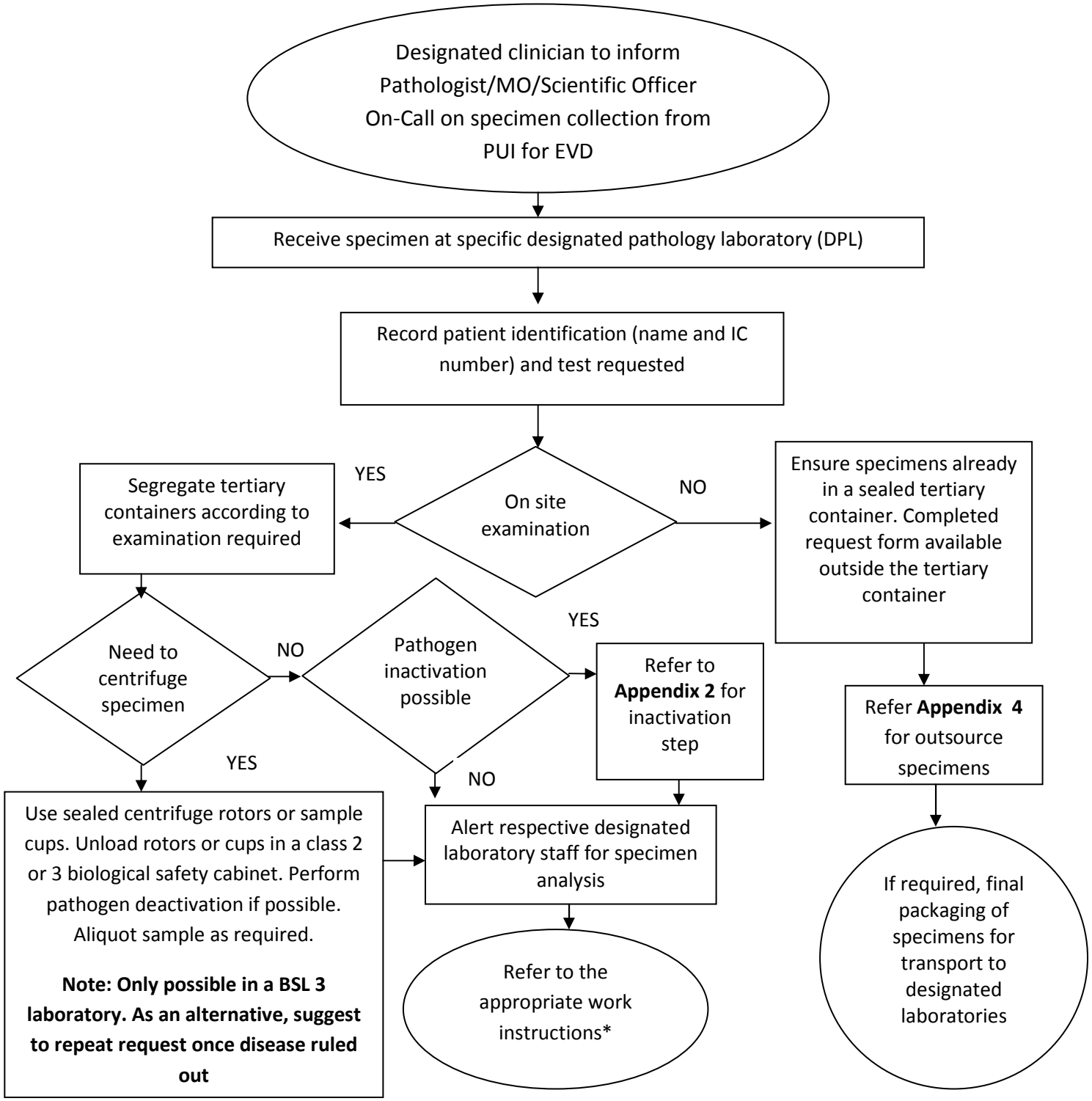
3. **Air-dried thick blood films should be fixed in 10% buffered formalin for 15 minutes**

    - After formalin treatment, films should be washed 3 times in distilled water at pH 7.0 and then stained.

4. **Thin films should be fixed in methanol for 5 minutes and then in 10% buffered formalin for 15 minutes OR fixed in methanol for 30 minutes followed by dry heat at 95^{o}C for 1 hour**

    - After formalin treatment, films should be washed 3 times in distilled water at pH 7.0 and then stained.

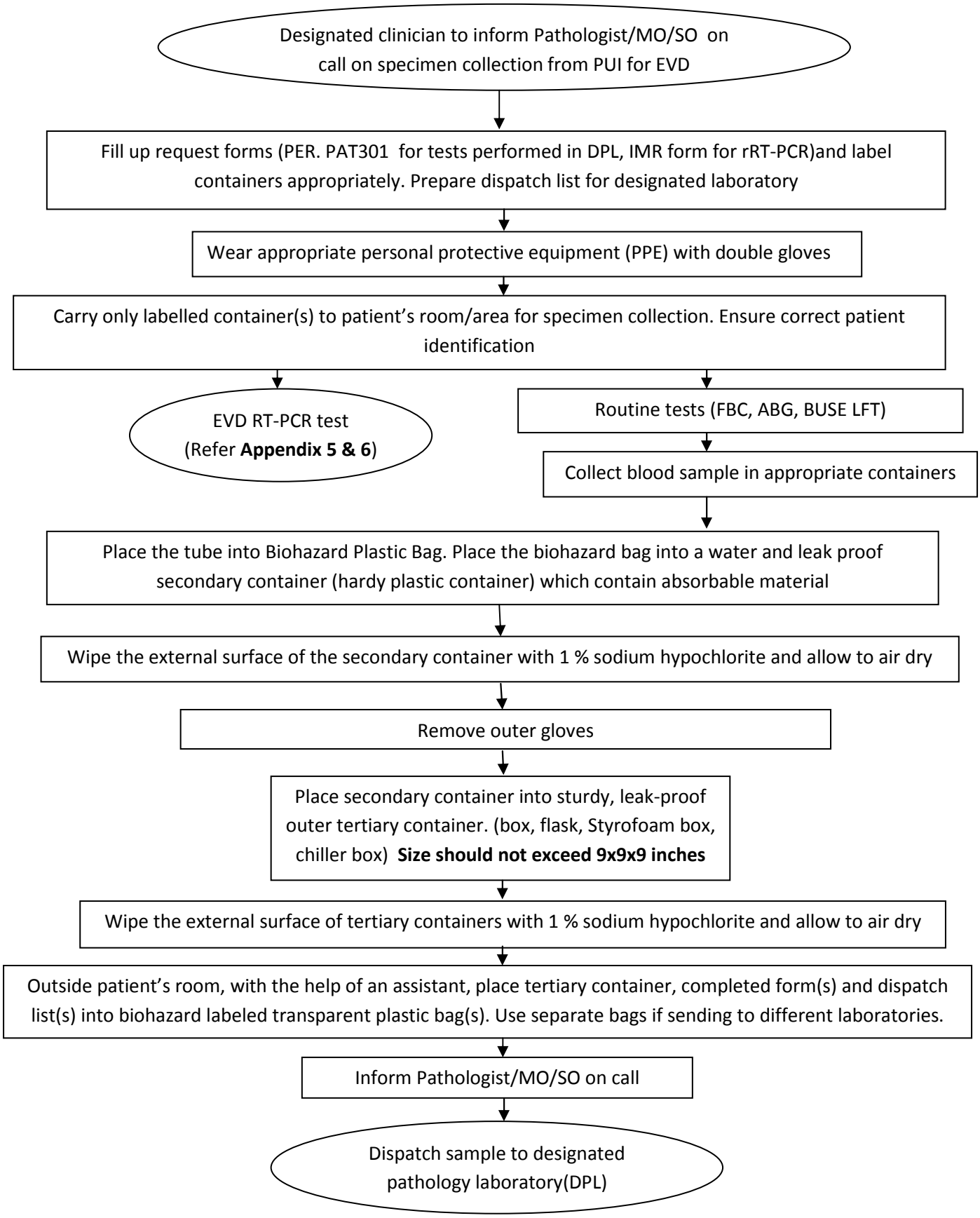
FLOWCHART FOR HANDLING SPECIMENS OF PUI FOR EVD IN DPL



The followings should be observed:-

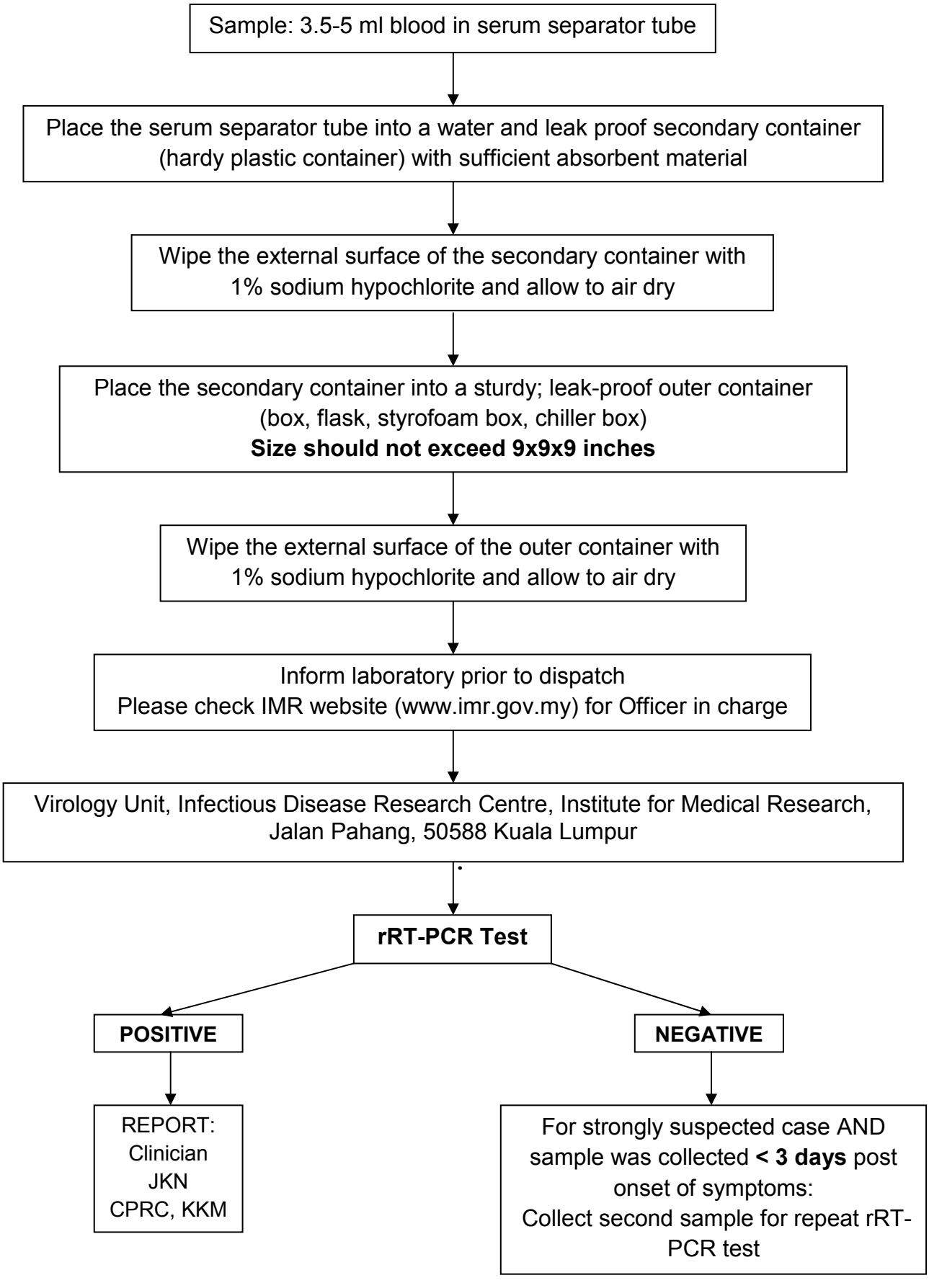
- Wear the appropriate personal protective equipment. `
- Any procedure that may generate aerosols should be performed in the appropriate BSC.
- Procedures performed outside of a BSC should be performed in a manner that minimizes the risk of exposure to an inadvertent release of the etiologic agent.
- Work surfaces and equipment should be decontaminated after specimens are processed.
- Biological waste should be treated as outlined in Waste Disposal Policy **(Annex 19)**

FLOWCHART FOR EVD SPECIMEN COLLECTION, PACKAGING AND TRANSPORT FOR MANAGEMENT OF PUI EVD IN DPL



NOTE: SPECIMEN FOR IMR AND DPL SHOULD BE IN SEPARATE TERTIARY CONTAINER

FLOW CHART OF SPECIMEN COLLECTION TRANSPORT FOR CONFIRMATORY TEST OF EBOLA VIRUS DISEASE (EVD) IN IMR



Appendix 6

SPECIMEN COLLECTION FOR CONFIRMATORY TEST OF EBOLA VIRUS DISEASE – THE DO AND DON'T

DO:

Specimen Collection and Transportation:

1. Ensure that the external of the specimen tube is not contaminated during specimen collection
2. An assistant should be at hand to receive the sample into a hardy secondary container by the bed side.
3. Use freshly made 1% sodium hypochlorite or 1 % Virkon for wiping external surface of secondary and outer containers
4. Place the request form outside the specimen transport container

Laboratory Testing:

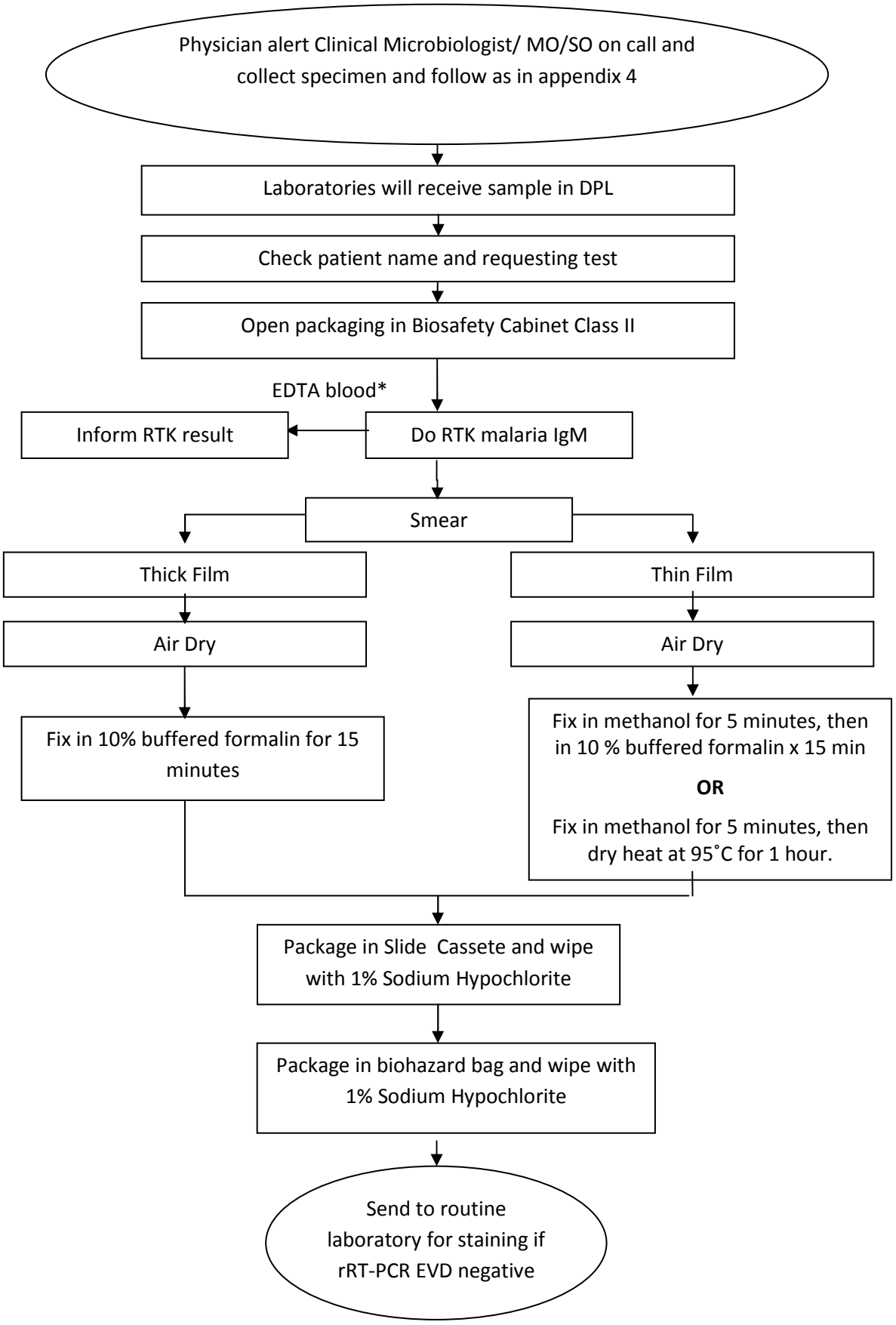
1. Have a designated reception areas for receiving samples
2. All samples should be handled in a BSC2 with BSL3 practices
3. Samples may need to be inactivated before performing various tests
4. Activities other than viral isolation on inactivated specimen should be performed in a BSL2 with BSL3 practices
5. External surface of inactivated specimen vials is wiped with disinfectant before passing it to other staff for various tests
6. Pipettes tips and Pasteur pipettes used must be disposed into disinfectant before autoclaving
7. All wastes need to be put in autoclave bags placed in BSC and bags wiped with disinfectant before taken out from BSC
8. All wastes need to be autoclaved.
9. Spillage inside BSC should be covered with incontinence pad saturated with 10% hypochlorite, left to soak 30 minutes, and then wiped with absorbent material soaked in 10% hypochlorite solution
10. Evacuate the laboratory for one hour if spillage outside BSC with potential aerosol formation occurs, then proceed as in no.13

11. Process all non-inactivated specimens in automated analysers that do not require the removal of top of the blood collection tube, provided there is proper disposal of waste fluids and the machine can be easily decontaminated after use. A separate machine should be used for other samples.

DON'T:

1. Never leave the specimen unattended
2. Do not wrap the specimen container with parafilm
3. Do not use stapler for packaging of the specimen
4. Avoid other laboratory activities during the process of Ebola virus testing
5. Avoid aerosol generating procedures
6. Do not use sodium hypochlorite which has been prepared ≥ 24 hours, or Virkon that has changed colour or has been prepared ≥ 5 days

Procedure for BFMP and Inactivation of Blood Smears for Malaria Parasite Examination



Appendix 8

CHECKLIST FOR EVD DESIGNATED PATHOLOGY LABORATORY (DPL) PREPAREDNESS

No.	Activity	Check box
1.	Ensure availability of relevant SOPs and guidelines for end users	
2.	Identify and equip DPL for initial specimen handling and testing area (before EVD ruled out)	
3.	Identify dedicated personnel (s) for	
	• Specimen handling, disinfection of work surface and equipment	
	• Management of waste disposal	
	• Co-ordination of supplies (PPE, reagents, disinfectants)	
	• Dedicated personnel pre and post exposure surveillance	
	• Tracking and compilation of request and results	
4.	Train dedicated personnel(s) on	
	• Test procedures	
	• Standard, contact and droplet precautions	
	• Hand hygiene	
	• Proper use and removal of PPE (N95 mask, face shield/goggles, gloves, head cover/cap, gown, rubber boots/shoe cover	
	• Disinfection procedures	
	• Spillage management	
	• Waste disposal	
5.	Prepare and procure stock-pile (equipment, reagents, PPE, disinfectants, handwash, spillage kit)	
6.	Mechanism for specimen transportation to designated laboratories	
7.	Mechanism for result transmission:	
	• DPL to patient area	
	• IMR or other designated EVD RT PCR testing laboratory to DPL and patient area	
8.	Mechanism of reporting to relevant authorities within the department, hospital, state and MOH	
9.	Update Pathologist, Medical officer, Scientific Officer on EVD guidelines, in charge personnel from time to time.	
10.	Identify an EVD liaison officer	
11.	Create EVD information corner	

Appendix 9

How to Safely Transport Human Blood Samples of PUI for Ebola Virus Disease In-Country by Road, Rail and Sea

Step 1: Before handling the sample, prepare all shipping equipment

(1) Manage logistics:

❑Identify the name and telephone number and/or e-mail of 1) responsible person /emergency contact at the National Reference Laboratory (this person should be available 24 hours a day until shipment arrives), and 2) lead epidemiologist /medical officer at the MoH

❑Notify National Reference Laboratory and the lead epidemiologist / medical officer that the sample shipment will be coming

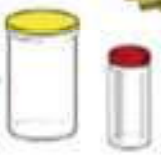
❑Verify schedule / timetable for the company transporting the sample

(2) Assemble equipment for packaging samples:

Packaging:

❑Absorbent material in sufficient quantity to absorb the entire liquid content, should the primary container(s) leak

❑Leak-proof secondary container



❑Rigid shipping box

❑Cushioning material, e.g. bubble wrap

❑Tape to seal the outer package (if required)

❑Inner lining

If refrigeration of the samples is necessary:

❑Styrofoam container

❑Frozen ice pads

Shipping / Transporting:

❑Receiver's name, address and telephone number

❑Epidemiological questionnaire or line-list which includes patient name, sex, age (birthdate), clinical information, symptoms, date of onset, date specimen collected, type of sample

❑Laboratory form or letter describing the main epidemiological and clinical findings and the lab tests that are required

❑Waterproof Marker

(3) Locate the sample:

Quick Tips for Category A shipments (an infectious substance that when exposed to it can cause permanent disability, life-threatening or fatal disease in healthy people or animals):

✓Ensure the primary and secondary containers are leak-proof

✓Vacutainer(s) in a sealed plastic bag or a screw-capped rigid tube can constitute a leak-proof primary container

✓Do not place any sharps in your package: no needles, no cutters, no blades.

✓Shipping packages can be reused; but the packaging needs to be appropriately disinfected.

✓The minimal dimensions to ship a Category A package is 10cm x 10cm x 10cm.

✓Remember that training to ship Category A samples is a legal requirement and must be renewed every 2 years.

Step 2: Prepare the sample

A. If the sample is in a plastic leak-proof primary container → proceed to step 3

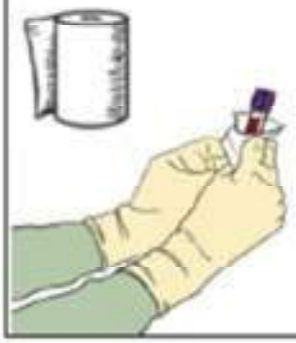
B. If sample is not in a plastic leak-proof primary container follow steps B1-B8

✓If sample is not in a leak-proof container, (e.g. Vacutainers or blood collection tubes) DO NOT touch Vacutainers or blood collection tubes without wearing appropriate personal protective equipment

Step B1. Put on a gown, face protection and gloves (over cuffs) *[see "How To safely collect blood samples from persons suspected to be infected with highly infectious blood-borne pathogens"]*

Step B2. Protect the sample from breaking during transport by wrapping the tube of blood in a paper towel or cushioning material.

Do not wipe sample collection tubes with disinfectant. Use disposable paper towel only.



Step B3. Ask a designated assistant to approach you with the unscrewed plastic leak-proof primary packaging container.

✓This person should have gloves on.

Step B4: Place the wrapped tube of blood into the plastic leak-proof primary packaging container.

✓Be careful not to touch the outside of the plastic leak-proof primary packaging container tube with contaminated gloves

Step B6: Have the designated, gloved assistant tightly close the plastic leak-proof primary packaging container.

When closed, the outside of the primary tube can be disinfected

Step B6. Both persons should remove their personal protective equipment *[see "How To safely collect blood samples from persons suspected to be infected with highly infectious blood-borne pathogens"]*

Step B7. Put contaminated items into an infectious waste bag for destruction

Step B8. Both persons should perform hand hygiene. Duration of the entire procedure: 40-60 sec.

Step 3: Package the sample (1st part)

Step 3a. Prepare the rigid shipping box by inserting the inner lining into it

3b. Open the secondary leak-proof container

✓Choose the size of the container to match the number of samples being shipped

Step 3c. Insert the absorbent material

✓There should be enough material to absorb all contents in primary container

Step 3d. Wrap the primary container with cushioning material

✓If packaging more than one sample, wrap each primary container individually with the bubble wrap to prevent breakage

Step 3e. Place the primary container (s) into the secondary container

Step 3f. Close the secondary container

Step 3: Package the sample (last part)

Step 3g. If refrigeration is not necessary, place the secondary container into the lined rigid shipping box and proceed to step 3j.

If refrigeration is necessary:

3h. Place the secondary leak-proof container into a styrofoam container and surround with ice packs.

3i. Place styrofoam container into the rigid shipping box

Step 3j: Put laboratory form / letter and epidemiological questionnaire into an envelope

Step 3k: Put laboratory form / letter and epidemiological questionnaire into the rigid shipping box

- ✓If no refrigeration is needed, place the laboratory form/letter and epidemiological questionnaire inside of the box.
- ✓If refrigeration is needed, place the form/letter on the outside of the styrofoam container so that moisture will not destroy the writing on the forms.

Step 3l: Close the top of the box (s)

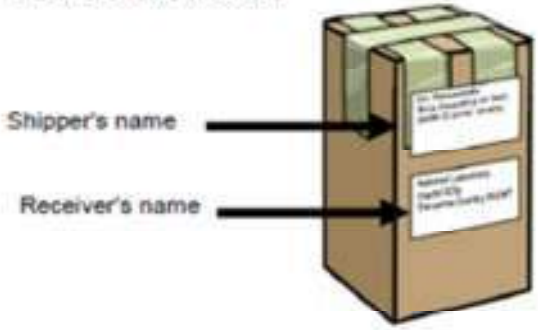
Step 3m: Tape the box closed

Step 4. Mark and label the box

Step 4a: Write the name and addresses on box

✓Shipper's name and address

✓Receiver's name and addre

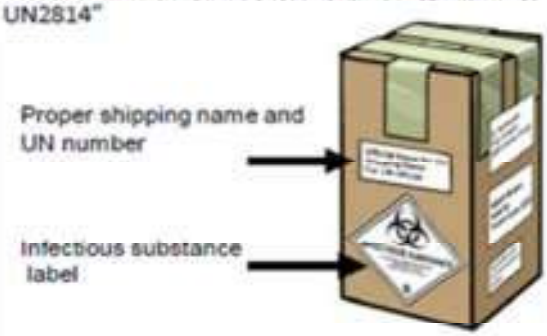


Step 4b. Write the name and the telephone number of the contact person at the National Reference Laboratory

✓Person should be available 24 hours a day until shipment arrives

Step 4c. Place the Infectious Substance label on box

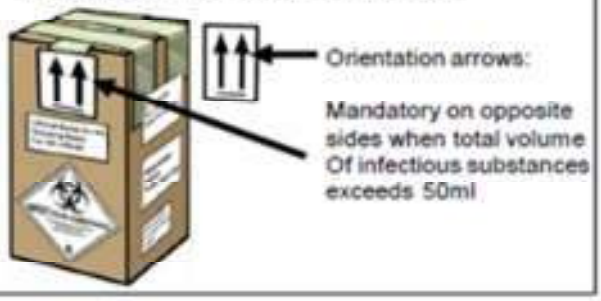
✓Write: 'infectious substance, affecting humans, UN2814"



Step 4d. Verify that the orientation arrows are on the box

✓Arrows should be found on opposite sides of box

✓Arrows are required when total volume of infectious substance exceeds 50 ml per box



Step 5. Finalize the shipment

Step 5a. Contact the National Reference Laboratory to inform them that samples have been sent

Step 5b. Contact the transporting company to either pick-up shipment or inform them that you will bring the shipment to them

✓Inform the transporting company if short delivery times are required due to refrigeration

Step 5c. Obtain shipping and tracking receipt and store in a safe location for 2 years

✓If possible, scan and email the tracking receipt to the lead epidemiologist / medical officer in charge of outbreak investigation and the responsible person in the laboratory

Appendix 10

CONTACT DETAILS OF PATHOLOGISTS NATIONWIDE

For any inquiries, please contact:

NAME	DESIGNATED PERSONNEL & HOSPITAL	CONTACT NUMBER	EMAIL ADDRESS
Y.Bhg.Datin Dr Salbiah Hj. Nawi	Pakar Perunding Mikrobiologi Jabatan Patologi Kuala Lumpur	012-3295350	salbiah_nawi@moh.gov.my
Dr Zubaidah Abd Wahab	Pakar Perunding Patologi (Mikrobiologi) dan Ketua Jabatan Patologi Hospital Sungai Buloh, Selangor	012-2398098	dr_zubaidah@moh.gov.my
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Y.Bhg.Datin Dr Ganeswrie a/p Rajasegaram	Pakar Perunding Patologi (Mikrobiologi) Jabatan Patologi Hospital Sultanah Aminah, Johor	017-7017705	ganiraj_balan@yahoo.com
Dr Roesnita Baharudin	Pakar Patologi (Mikrobiologi) Jabatan Patologi Hospital Tengku Ampuan Afzan, Kuantan, Pahang	019-9883679	roes_zz@yahoo.com
Dr Fatimah Haslina Abdullah	Pakar Patologi (Mikrobiologi) Jabatan Patologi Hospital Sultanah Nur Zahirah, Kuala Terengganu, Terengganu	013-9229377	lishsnz@gmail.com

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Dr Idimaz Hj Jabbari	Pakar Patologi (Mikrobiologi) Jabatan Patologi Hospital Umum Sarawak, Kuching, Sarawak	019-2440840	deezee74@yahoo.com
Dr Noorhayati Abdul Rahman	Pakar Patologi (Mikrobiologi) Jabatan Patologi Queen Elizabeth, Kota Kinabalu, Sabah	019-9189594	hayatie78@gmail.com
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Dr.Nurulhuda Umur @ Adli	Pakar Patologi (Mikrobiologi) Jabatan Patologi Hospital Kuala Lumpur	019-2837890	nurulhudaumar@yahoo.com.my

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Dr Salina bt Mohamed Shukor	Pakar Patologi (Mikrobiologi) Seksyen Penyakit Makmal Kesihatan Awam Kebangsaan Sg.Buloh, Selangor	013-3807044	drsalina_msukur@moh.gov.my

Appendix 11

REFERENCES

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WHO Statement on the Meeting of the International Health Regulations Emergency Committee Regarding the 2014 Ebola Outbreak in West Africa 8th August 2014
http://www.who.int/mediacentre/news/statements/2014/ebola-20140808/en/

In-Country Shipment: How to Safely Ship Human Blood Samples from Suspected Ebola Cases within a Country by Road, Rail and Sea by WHO, August 2014
http://www.who.int/csr/resources/publications/ebola/blood-shipment-en.pdf

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- Dr. Thatcheiany Kumariah
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- Pn. Rusmah Yusof
  Pegawai Sains (Mikrobiologi)

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  Pegawai Sains (Mikrobiologi)

- En. Ng Hong Seng
  Pegawai Sains (Mikrobiologi)

FORENSIC MANAGEMENT FOR DEAD BODY OF PERSON UNDER INVESTIGATION (PUI) / CONFIRMED FOR EBOLA VIRUS DISEASE (EVD)

Contents

A. AUTOPSY FACILITY REQUIREMENT FOR EBOLA VIRUS DISEASE (EVD)

- Ebola Virus - categorized as Class IV Pathogen (WHO)

- *Biosafety Level (BSL) 4 Autopsy Facilities requirement (CDC) and Class III biological safety cabinets or Class II biological safety cabinets used with one-piece positive pressure personnel suits ventilated by a life support system

  A **biosafety level (BSL) is a level of the biocontainment precautions required to isolate dangerous biological agents in an enclosed facility. The levels of containment range from the lowest biosafety level 1 (BSL-1) to the highest at level 4 (BSL-4).*

- Forensic Referral Centres of MOH Malaysia with BSL autopsy facility (refer **Table 1**):

  a) Four (4) forensic centres with autopsy facility of BSL 2 plus with PAPR suits:
     - Hospital Kuala Lumpur
     - Hospital Pulau Pinang
     - Hospital Tengku Ampuan Afzan, Kuantan, Pahang
     - Hospital Queen Elizabeth, Kota Kinabalu, Sabah

  b) One (1) forensic centre with autopsy facility of BSL 3 with PAPR suits, i.e. in Hospital Sultanah Bahiyah, Alor Setar, Kedah

  c) Eleven (11) forensic centres with autopsy facility of BSL 2 with PAPR suits

  d) No forensic centre with autopsy facility of BSL 4

Table 1: Forensic Referral Centres of MOH Malaysia

Referral Forensic Centre	BSL Category	States / Area of Coverage	Specialist(s) & Contact Number
Hospital Kuala Lumpur	BSL 2+	WP Kuala Lumpur WP Putrajaya	Dr. Mohd Shah Mahmood Dr. Nurliza Abdullah Dr. Siew Sheue Feng Dr. Ahmad Hafizam Hasmi Dr. Haryanti Sara Azmeen Mohd Razali Tel. No.: 03-26155299
Hospital Sungai Buloh, Selangor	BSL 2	Selangor	Dr. Shahidan Md Noor Tel. No.: 03-61454333
Hospital Tengku Ampuan Rahimah, Klang, Selangor	BSL 2		Dr. Khairul Azman Ibrahim Dr. Nur Ayutimasery Abdullah Dr. Kartini Md Ariff Tel. No.: 03-33757000
Hospital Serdang, Selangor	BSL 2		Dr. Mohamad Azaini Ibrahim Dr. Salmah Arshad Tel. No.: 03-89475268
Hospital Tuanku Jaafar, Seremban, Negeri Sembilan	BSL 2	Negeri Sembilan	Dr. Sharifah Safoorah Syed Alwee Al'aidrus No. Tel.: 06-7684126
Hospital Melaka	BSL 2	Melaka & Johor (Muar and Segamat only)	Dr. Emizam Mohamadon Tel. No.: 06-2892344
Hospital Sultanah Aminah, Johor Bahru, Johor	BSL 2	Johor	Dr. Mohamad Aznool Haidy Ahsorori Dr. Khairul Anuar Zainun Tel. No.: 07-2231666
Hospital Sultan Ismail, Johor Bahru, Johor	BSL 2		Dr. Rohayu Shahar Adnan Tel. No.: 07-3565000
Hospital Sultanah Nur Zahirah, Kuala Terengganu, Terengganu	BSL 2	Terengganu	Dr. Zuraida Md Zainuri Tel. No.: 09-6212121
Hospital Raja Perempuan Zainab II, Kota Bahru, Kelantan	BSL 2	Kelantan	Dr. Wan Mohamad Zamri Wan Nawawi Tel. No.: 09-7452436
Hospital Tengku Ampuan Afzan, Kuantan, Pahang	BSL 2+	Pahang	Dr. Nor Zaimah Mohd Idris Dr. Sri Marni Zainal Abidin Tel. No.: 09-5572290
Hospital Raja Permaisuri Bainun, Ipoh	BSL 2	Perak	Dr. Mohammad Shafie Othman Dr. Siti Zanariah Md Naziri Tel. No.: 05-2085311
Hospital Pulau Pinang	BSL 2+	Pulau Pinang	Dato' Dr Zahari Noor Dato' Dr. Bhupinder Singh A/L Jeswant Singh Dr. Murali Narayanasamy Tel. No.: 04-2225391

Hospital Sultanah Bahiyah, Alor Setar, Kedah	BSL 3	Kedah Perlis	Dr. Mohd Suhani Mohd Noor Dr. Nor 'Amirah Ahmad Tel No.: 04-7407316
Hospital Umum Sarawak, Kuching, Sarawak	BSL 2	Sarawak	Dr. Norliza Ibrahim Tel. No.: 08-2276666
Hospital Queen Elizabeth, Kota Kinabalu, Sabah	BSL 2+	Sabah WP Labuan	Dr. Jessie Hiu Dr. Amir Saad Abdul Rahim Tel. No.: 08-8517429)

Note:

- Death of the suspected high-risk cases of other deadly infectious diseases that can cause harm to the public or the mortuary personnel, autopsy will be conducted in the autopsy room BSL-2 and above.

- Autopsy room labeled BSL-2 and above is safe to carry out a high risk autopsy examination as the room is well-equipped with good ventilation and protection to the mortuary personnel.

- For internal autopsy required BSL 3 and above.

- Criteria for each BSL (Refer Appendix II)

Source: MYHEALTH 2015

B. FORENSIC POLICY IN MANAGING EBOLA VIRUS DISEASE

- No autopsy (dissection) is to be performed on death cases involving PUI EVD.

- Invasive procedures for specimen sampling shall be avoided, unless under unusual circumstances.

- The unusual circumstances would include the homicide of an Ebola patient. The necessity for and extent of the post mortem examination would be determined on a case-by-case basis after consultation with the police and Forensic Pathologist.

- Only personnel who are trained in handling infected human remains and wearing appropriate PPE, shall be allowed to handle any death cases involving PUI EVD.

C. GUIDELINE FOR THE PREPARATION OF MUSLIM'S DEAD BODY IN ISOLATION WARD FOR PERSON UNDER INVESTIGATION (PUI) / CONFIRMED FOR EBOLA VIRUS DISEASE (EVD) INFECTION – REFER FLOWCHART 1

- Staff involved in handling and preparing the dead body **must** wear appropriate personal protective equipment such as Tyvek (full bodysuit), gloves and full-face mask (refer Appendix I).

- The trained attending medical team shall ensure that relevant specimens (RT-PCR for EVD / malaria / dengue / other necessary investigations) have been taken for diagnostic purposes prior to the preparation of the body.

- **A PUI case of Ebola Virus Disease (EVD) must be managed as CONFIRMED case of EVD for the purpose of preparation and disposal of the dead body.**

- Relatives **shall not** be allowed to touch or kiss the dead body.

- Relatives can give last respect only by looking from outside isolation room.

- The dead body **shall be prepared at the isolation ward before transfer to mortuary**.

- Preparations of the deceased at the isolation ward shall be conducted by the **trained isolation ward staff.**

- It is recommended that the bodies of the PUI / confirmed EVD case shall be buried as soon as practicable.

- Body preparation in the isolation ward comprises of the following:

  a) Remove clothing from the deceased.

  b) Insert cotton wool in the orifices of the deceased using forceps:

     - First layer: to put the cotton wool soaked in 0.5% sodium hypochlorite.
     - Second layer: to put dry cotton wool.

  c) Wrap the body according to the '*kapan*' procedure:

     - First layer with white cotton linen.
     - Followed by a second layer with a leak proof plastic shroud.
     - Thirdly, to place the body in a zippered body bag – before closing the zippered body bag, plastic shroud to be sprayed with 0.5% sodium hypochlorite.

  d) Then, dry ablution (tayammum) over the surface of the zippered body bag will be done by a **trained forensic staff** in the isolation ward. Forensic staff will be called by the **isolation ward staff** to the ward to perform the dry ablution (tayammum).

  e) Prior to any transfer, perform surface decontamination of zippered body bag with 0.5% sodium hypochlorite.

  f) Body to be placed inside a coffin and seal the coffin.

- The body placed in the sealed coffin shall be transferred from the isolation ward to the mortuary by two (2) attendants (one each from the isolation ward and mortuary). Both attendants **must** wear the personal protective equipment – refer Appendix I.

- Prayer (*solat jenazah*) shall be performed at the loading bay of mortuary.

- Then the body shall be released to the dedicated burial team for burial purposes.

- Decontamination of the respective isolation room by the trained isolation ward staff after the body has been transported out.

- Perform surface decontamination with recommended disinfectant of the vehicle, trolley, stretcher etc. that have been used to transport bodies.

References:

1. *CDC. Medical Examiners, Coroners, and Biologic Terrorism A Guidebook for Surveillance and Case Management. MMWR 2004;53(RR08);1-27. (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5308a1.htm)*

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4. *Pengurusan jenazah orang islam yang disyaki atau disahkan dijangkiti virus Ebola di Malaysia, Februari 2015. Available at: www.e-fatwa.gov.my/fatwa-kebangsaan/pengurusan-jenazah-orang-islam-yang-disyaki atau-disahkan-dijangkiti-virus-ebola-eb*

D. GUIDELINE FOR MANAGEMENT OF BROUGHT-IN-DEAD (BID) CASES OF PUI FOR EVD – REFER FLOWCHART 2

- Brought In Dead (BID) bodies of PUI EVD case shall be sent to the Forensic Medicine Referral Center (refer Table 1) as soon as practicable.

- To obtain a Police Order (Form Polis 61) for post mortem examination prior to registration of body to Forensic Medicine Referral Center (refer Table 1).

- Staff involved in handling and preparing the dead body of PUI EVD infection must wear appropriate personal protective equipment (refer Appendix I).

- The case shall be notified to the following agencies **simultaneously**:

  - The National Crisis Preparedness and Response Centre (CPRC), Ministry of Health Malaysia
  - The respective State Health Departments (JKN)
  - The respective District Health Office (PKD)

- The transport of Brought In Dead (BID) bodies of PUI EVD infection shall only be carried out upon approval by the respective State Health Director.

- Referral letter shall be prepared by the referring Hospital Director and addressed to the receiving Hospital Director.

- The receiving hospital shall be informed prior to the initiation to transport the body of PUI EVD infection.

- Body preparation procedures are as follows:

  - First layer: wrap the body with white cotton linen
  - Second layer: place the wrapped body into the first body bag
  - Third layer: place the first body bag into the second zippered body bag. Before closing the zippered body bag, the first layer body bag shall be sprayed with 0.5% sodium hypochlorite

- Prior to any transfer, perform surface decontamination of the outer layer zippered body bag with recommended disinfectant.

- The body placed in the body bag shall be transported using designated hospital transport / vehicle.

- The attending medical officer shall accompany the body together with the following documents:

  a) Referral letter for postmortem examination signed by Director of the referring hospital to the Director of receiving hospital

  b) Post mortem Examination Order (Form Polic e61) issued by the Police or a written order / notice as stipulated under Section 16, Prevention and Control of Infectious Disease Act 1988 (Act 342)

  c) Relevant clinical summary of the case

  d) Identification card / passport of the deceased (if available)

- Accompanying relatives are advisable to travel in their personal vehicles.

- The hospital transport / vehicle used to transport the body must be disinfected upon completion of the delivery.

E. GUIDELINE FOR POST MORTEM EXAMINATION FOR PUI / CONFIRMED EVD INFECTION

- The post mortem examination requires strict adherence to protocols and safety precautions which include usage of appropriate personal protective equipment (refer Appendix I) and post mortem room facilities with appropriate bio safety features.

- The post-mortem examination should be planned in advance such as date and time, health personnel involved, instruments, equipment, procedures required and the type of specimens to be taken.

- Only **four trained personnel** should conduct the post mortem examination. These personnel should comprise of a Forensic Pathologist, a Medical Officer, a Forensic Medical Assistant and a Forensic Health Attendant.

- No autopsies (dissection) to be performed on PUI EVD death cases.

- Only blood sampling shall be done either by subclavian vessels puncture or cardiac puncture.

- The necessity for and extent of the post mortem examination would be determined on a case-by-case basis in consultation with the police and forensic pathologist e.g. homicide case.

- Specimen bottles / tubes and containers should be prepared in advance. This will determine the required number/type of specimens to be collected and ensure containers are properly labeled.

- The post-mortem examination team shall ensure that relevant specimens (RT-PCR EVD / malaria / dengue / other necessary investigations) are taken for diagnostic purposes.

- Specimens collected should be placed immediately into appropriate containers. These containers must be immediately closed and sealed; the outer surface of container should be cleaned and placed in double polythene bags with bio-hazard labels / tags. These bags are then passed through the specimen chamber (if available) or carried out by the personnel when leaving the post mortem room.

- After blood sampling, the body should be cleaned **using 0.5% Sodium Hypochlorite or any suitable / recommended disinfectant**.

- The body shall be wrapped in 3-layered body preparation as the following:

  a) First layer: wrap body with leak-proof cadaver sealer plastic

  b) Second layer: place body in a body bag and spray bag with 0.5% sodium hypochlorite solution.

  c) Third layer: place the body in a zippered body bag and spray zippered body bag with 0.5% sodium hypochlorite solution.

- The entire post mortem room must be cleaned and mopped. All infected waste materials such as contaminated clothing of the body, linen and disposable items must be put in a 2 layered clinical waste (yellow colored) plastic bags. Instruments are washed thoroughly and immersed in 0.5% Sodium Hypochlorite solution. Post mortem table, workstation, floor and walls are to be cleaned thoroughly and disinfected with 0.5% sodium hypochlorite solution.

- The post mortem personnel should spray onto the surface of their PPE with disinfectant before removing them. All disposable garments including the head covers / hoods, body suits / coverall, gloves and aprons must be placed in the

double layered yellow plastic bag for incineration. The respirator, hood, blower/filtered fan and hose must be thoroughly sprayed and wiped with disinfectant after removal, and left to air dry in a room.

- The personnel must bathe immediately and change into a fresh clothing / attire before leaving the changing room.

F. GUIDELINE FOR DISPOSAL OF DEAD BODIES FOR PUI / CONFIRMED EVD INFECTION

- The body will be released to the Burial Team from the respective District Health Office immediately after post-mortem examination with strict precautionary measures for disposal via burial or cremation.

- Embalming is **NOT ALLOWED**.

- The body shall be placed in a coffin and sealed before leaving the mortuary.

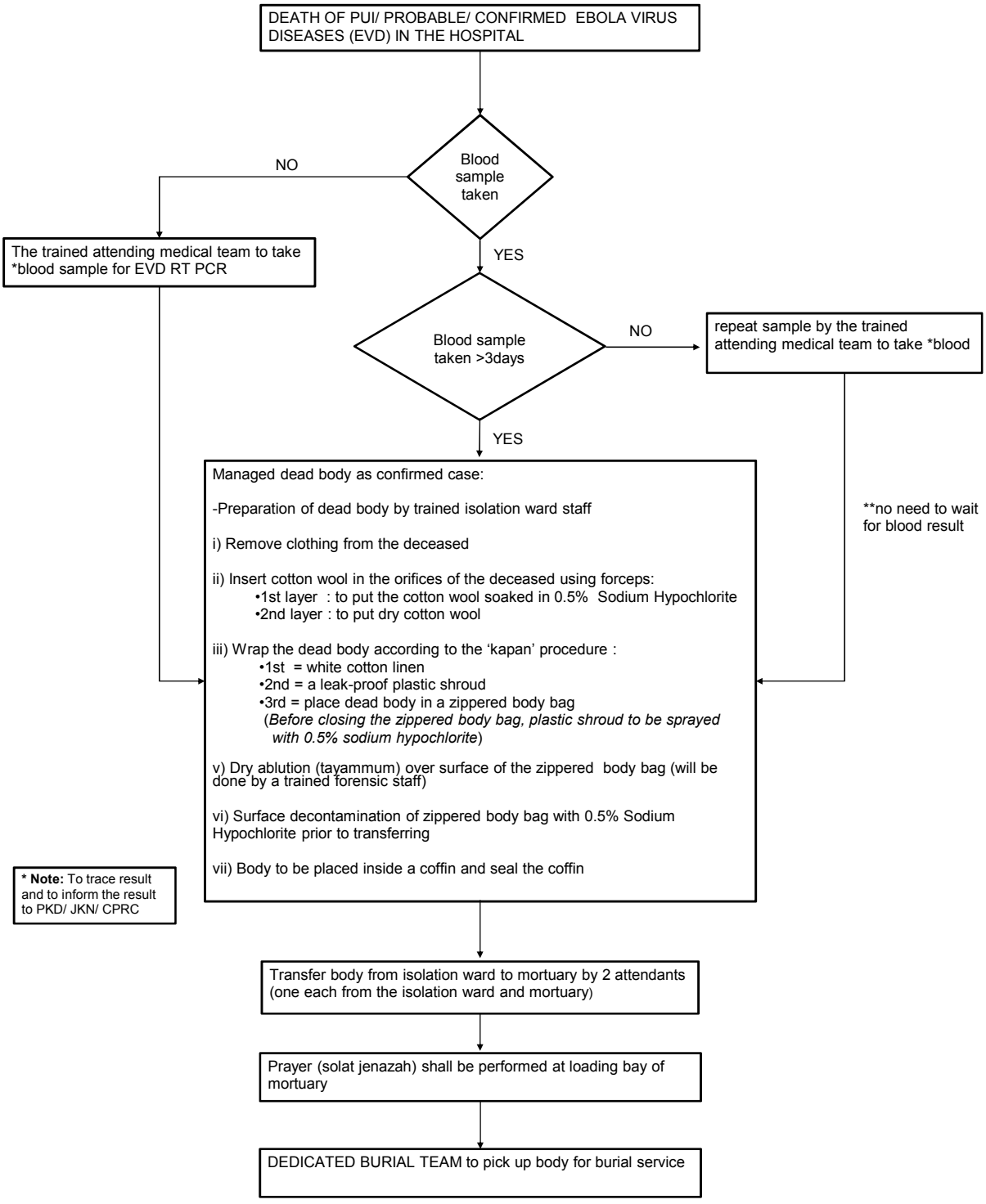
- It is **STRICTLY PROHIBITED** to open the sealed coffin and the Burial Team from the respective District Health Office must ensure that this precautionary measure is adhered to.

G. LIST OF FLOWCHARTS

- **Flowchart 1:** Preparation of Muslim's Dead Body in Isolation Ward for Person Under Investigation (PUI) / Confirmed For Ebola Virus Disease (EVD) Infection

- **Flowchart 2:** Transferring Dead Body of PUI for EVD to Referral Forensic Centre for Post Mortem Examination

Flowchart 1: Preparation of Muslim's Dead Body in Isolation Ward for Person Under Investigation (PUI) / Confirmed For Ebola Virus Disease (EVD) Infection



Flowchart 2: Transferring Dead Body of PUI for EVD to Referral Forensic Centre for Post Mortem Examination

BODY PUI EBOLA VIRUS DISEASE (EVD) REQUIRE POSTMORTEM EXAMINATION
- Brought In Dead (BID) cases at hospital without EVD dedicated forensic centre

ACTION TO BE TAKEN BY REFERRING HOSPITAL

To inform :

1) The National CPRC, Ministry of Health
2) The respective State Health Departments (JKN)
3) The respective District Health Offices (PKD)
4) The Referral Forensic Centre

To obtain :

1) Police Order (Polis 61 Form) for post mortem examination

2) Approval from the State Health Director of the state involved for transport of body suspected / probable EVD by Hospital Director of the referring hospital

To prepare :

1) Referral letter by the referring Hospital Director and addressed to the receiving Hospital Director.

2) Preparation of the body (to ensure the body is properly sealed before any transport)
- •First layer : Wrap the dead body with white cotton linen
- •Second layer : Place the wrapped dead body into the first body bag
- •Third layer : Place the first body bag into the second body bag (before closing the zippered body bag, 1st layer body bag shall be sprayed with 0.5% sodium hypochlorite)

To transport :

1) The body in the body bag shall be transported in a dedicated hospital transport / vehicle.

2) The attending medical officer shall accompany the body and shall bring along these documents:-
- •Referral letter for postmortem examination signed by Director of the referring hospital to the Director of receiving hospital
- •Postmortem Examination Order (Form Police 61) issued by the Police or a completed written order / notice as stipulated in Section 16, Infectious Disease Control Act 1988 (Act 342)
- •Relevant Clinical Summary of the case
- •Identification card / passport of the deceased (if available)

3) The receiving hospital shall be informed before any initiation of transportation of dead body of PUI EVD infection.

IMPORTANTS!

1) Staff involved in handling and preparing the dead body of PUI EVD infection must wear appropriate personal protective equipment such as Tyvex (full body suits), gloves and full face mask. (REFER APPENDIX I)

2) Decontamination of the respective isolation room shall be done by the trained isolation ward staff after the body has been transfer out.

3) Perform surface decontamination with recommended disinfectant of the vehicle, trolley, stretcher and etc that have been used to transport bodies

4) The transport / vehicle used to transport the body need to be disinfected after the body has been transfer out.

5) Accompanying relatives to travel in a separate own vehicle

Appendix I

Healthcare workers must use proper Personal Protective Equipment (PPE) which are the Protective Garments and Respiratory Gear.

PPE suggestion for healthcare workers handling and preparing dead bodies of PUI EVD in isolation ward & outside hospital

- Disposable waterproof bodysuits/ coverall with full feet cover.
- N95/N100 face mask
- Full face shield head gear/ helmet
- Double gloves (with the outer layer being elbow-lengthened gloves)
- Knee length Wellington boots
- Disposable shoe/ boot covers

PPE suggestion for Attendant in transferring PUI / Confirmed EVD dead patient from ward to mortuary

- Disposable scrub suit or equivalent
- Protective aprons
- N95/N100 face mask
- Full face shield head gear/ helmet
- Double gloves (with the outer layer being elbow-lengthened gloves)
- Knee length Wellington boots
- Disposable shoe/ boot covers

PPE suggestion for staff involved in Forensic Department in handling and preparing the dead body and collecting sample

- Disposable waterproof bodysuits/ coverall with full feet cover and hood.
- Protective aprons
- N95/N100 face mask
- Full face shield head gear/ goggles
- Double gloves (with the outer layer being elbow-lengthened gloves)
- Knee length Wellington boots
- Disposable shoe/ boot covers

Respiratory Gear Include:

- Full faced *Powered Air Purifying Respirators* (PAPR) with HEPA filter (A loose fitting type is recommended). This respirator consists of a hood or helmet, breathing tube, battery-operated blower, and HEPA filters. It meets the CDC guideline

Appendix II

RECOMMENDED BIOSAFETY LEVEL CRITERIA FOR INFECTIOUS AGENTS

BSL	Agents	Practices	Facilities
1	Not known to consistently cause diseases in healthy adults	Standard microbiological practices	Laboratory bench and sink required
2	Agents associated with human disease Routes of transmission include percutaneous injury, ingestion, ingestion, mucous membrane exposure	BSL 1 practice plus Limited access Biohazard warning signs Sharps precautions Biosafety manual defining any needed waste decontamination or medical surveillance policies	BSL 1 plus: Autoclave available
3	Indigenous or exotic agents that may cause serious or potentially lethal disease through the inhalational route of exposure	BSL 2 practices plus: Controlled access Decontamination of all waste Decontamination of laboratory clothing before laundering	BSL 2 plus: Physical separation from access corridors Self-closing, double door access Exhausted air not recirculated Negative airflow into the facility Entry through airlock or anteroom Hand washing sink near lab exit
4	Dangerous/ exotic agents which post high individual risk of aerosol-transmitted laboratory infections that are no vaccines or treatments Related agents with unknown risk of transmission	BSL 3 practise plus: Clothing change before entering Shower on exit All material decontaminated on exit from facility	BSL 3 plus: Separate building or isolated zone Dedicated supply and exhaust, vacuum and decontamination systems Other requirements outlined in the text

'Annex 18'

Ebola Virus Disease (EVD): Management Of Linen

- Soiled linen without any solid excrement such as faeces or vomit should be placed in red bag relined with alginate bag at the site of use and the surfaces should be disinfected using 0.5% sodium hypochlorite (refer **Annex 20**) before removal from the contaminated area (e.g. isolation room).

- Linen should be then transported directly to the laundry area in its container and laundered promptly with water and detergent.

- For low-temperature laundering, wash linen with detergent and water, rinse and then soak in 0.05% chlorine for approximately 30 minutes. Linen should then be dried according to routine standards and procedures.

- Consideration should be given for patients with high probability or confirmed Ebola to use disposable garments and linen. If these are not available, any linen soiled with solid excrement such as faeces or vomit should be sent for incineration.

'Annex 19'

Ebola Virus Disease: Waste Management

- All clinical waste should be disposed in accordance to MOH's Waste Disposal Policy.

- All waste from patients classed as 'high possibility of' or 'confirmed' VHF infection is classified as Category A infectious waste, on the basis that it is known or suspected to be contaminated with pathogens presenting the most severe risk of infection.

- All treatment, disposal and transport of waste should therefore follow the guidance for Category A infectious waste i.e. autoclaved on site or sent for incineration.

- General clinical waste must be placed in a biohazard blur plastic bag, sealed and the outside of the bag must be sprayed over with 0.5% sodium hypochlorite.

A) Laboratory Waste

- All cultures of pathogens should be inactivated / autoclaved on site prior to final disposal because of the increased risk of exposure associated with higher concentrations of biological agents.

B) Disposal Of Waste

- Waste should be packaged for carriage and transferred to an incinerator as soon as possible. Waste (including sharps receptacles) must be placed in appropriate container as approved by MOH for transportation.

- A reputable and licensed waste contractor must undertake transport to the incinerator. Adequate contingency arrangements should be made in advance with the contractor to ensure safe collection, transport and disposal.

- Prior to collection by the contractor, waste must be stored securely and access restricted to authorised and trained personnel.

'Annex 20'

Ebola Virus Disease (EVD): Preparation of Disinfectant

1. SODIUM HYPOCHLORITE

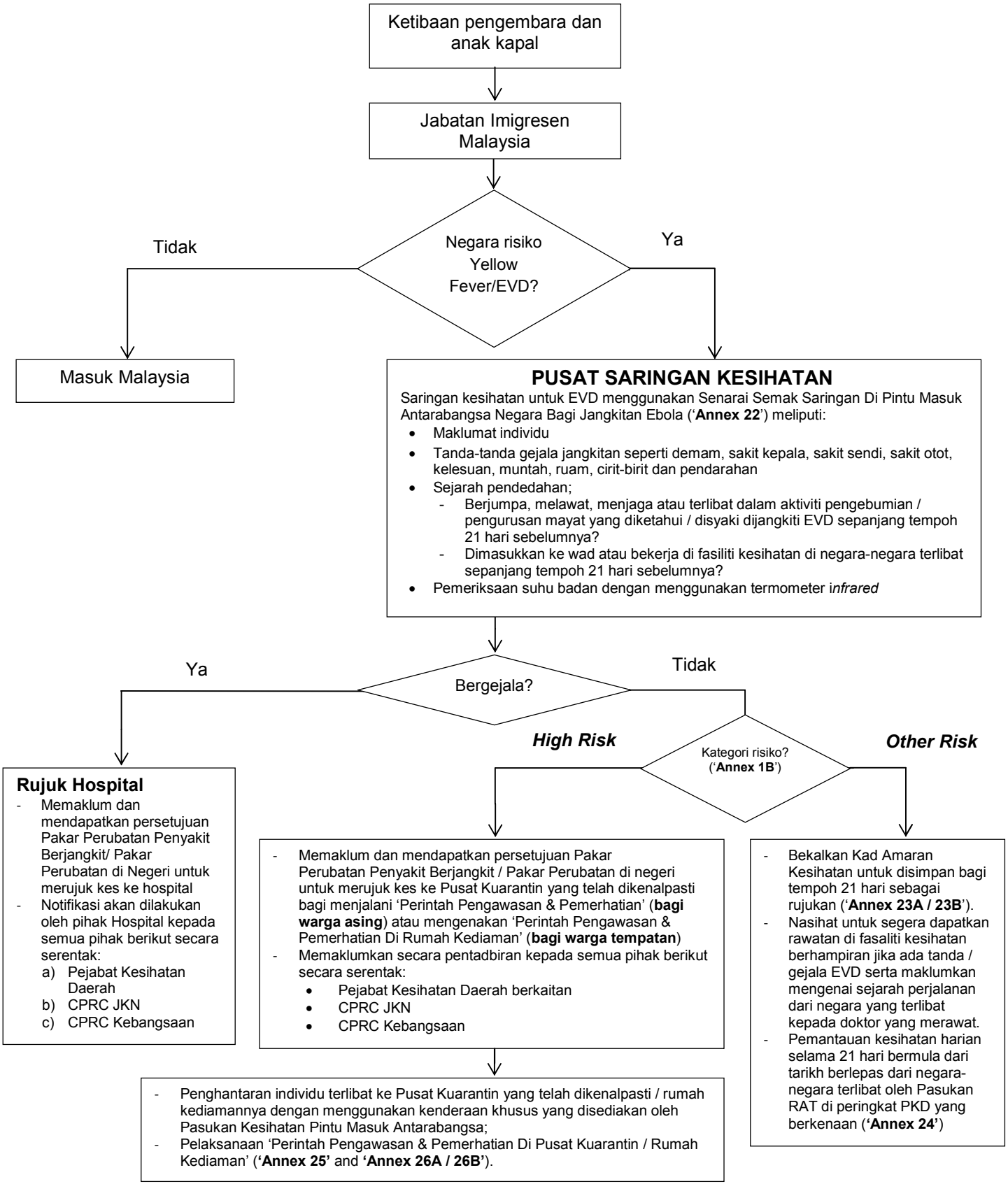
2.5g NaDCC tablet/ 1.5 g klorin

CONCENTRATION OF DISINFECTANT		DILUTION METHOD			USAGE
		0.5gm tablet	**1.25gm tablet**	**2.5gm tablet**	
10,000 ppm	1%	17 tablets in 0.5 litres (L) of water	14 tablets in 1L of water	7 tablets in 1L of water	• Spillage management • Wiping & cleaning of blood/body fluids
5,000 ppm	0.5%	9 tablets in 0.5L of water	7 tablets in 1L of water	9 tablets in 2.5L of water	• Wiping of external surface of soiled linen bag
1,000 ppm	0.1%	4 tablets in 1L of water	3 tablets in 2L of water	4 tablets in 5L of water	• General cleaning
150 ppm	0.015%	1 tablet in 2L of water	1 tablet in 5L of water	1 tablet in 10L of water	

2. 70 % ALCOHOL

Mix 70 ml Alcohol and make up to 100 ml with distilled water

CARTA ALIR SARINGAN KESIHATAN BAGI PENYAKIT VIRUS EBOLA (EVD) DI PINTU MASUK ANTARABANGSA NEGARA



SENARAI SEMAK SARINGAN DI PINTU MASUK ANTARABANGSA NEGARA
BAGI JANGKITAN EBOLA

(A) Maklumat Individu:

Nama		E-Mel	
Umur		No. Telefon (Di Malaysia)	
Jantina		Alamat Tempat Tinggal (Di Malaysia)	
Warganegara			
No. Kad Pengenalan / Passport			

(B) Butiran Lanjut:

1. Telah tiba dari negara yang aktif dengan penularan EVD: **sila namakan negara tersebut:*			
2. Butiran penerbangan pulang: • *Route*: …… • No. penerbangan: …… • No. tempat duduk: ……			
3. Gejala yang dikesan (sila pilih **YA** atau **TIDAK** bagi setiap gejala yang disenaraikan):			
• Demam	YA ( ) TIDAK ( )	• Ruam	YA ( ) TIDAK ( )
• Sakit otot / sendi	YA ( ) TIDAK ( )	• Muntah	YA ( ) TIDAK ( )
• Sakit kepala	YA ( ) TIDAK ( )	• Cirit birit	YA ( ) TIDAK ( )
• Sakit tekak	YA ( ) TIDAK ( )	• Pendarahan	YA ( ) TIDAK ( )
4. Sejarah pendedahan semasa di negara yang aktif dengan penularan EVD:			
• Berjumpa, melawat, menjaga atau terlibat dalam aktiviti pengebumian / pengurusan mayat yang diketahui / disyaki dijangkiti EVD sepanjang tempoh 21 hari sebelumnya?			YA ( ) TIDAK ( )
• Dimasukkan ke wad atau bekerja di fasiliti kesihatan di negara-negara terlibat sepanjang tempoh 21 hari sebelumnya?			YA ( ) TIDAK ( )
5. Catatan:			

(C) Pemeriksaan Fizikal:

- Suhu badan: …… ^{o}C
- Tekanan darah: …… mm/Hg
- Kadar denyutan nadi: …… / minit
- Lain-lain yang berkaitan (cth. jantung, paru-paru, *abdomen* dll.) ……

(D) Tindakan Susulan:

……
……
……
……

(E) Disediakan Oleh:

- Nama:……
- Jawatan: ……
- Tarikh & Masa: ……

'Annex 23A'

KAD AMARAN KESIHATAN
BAGI PENGEMBARA DAN ANAK KAPAL YANG TIBA DARI NEGARA-NEGARA YANG DIJANGKITI PENYAKIT VIRUS EBOLA (EVD)

Simpan kad ini selama 21 hari setelah kembali ke Malaysia. Sila pantau tahap kesihatan anda dan dapatkan rawatan dengan **segera** di fasiliti kesihatan yang berhampiran sekiranya mempunyai gejala-gejala seperti di bawah:

- Demam (>38.6°C);
- Kelesuan;
- Sakit otot;
- Sakit kepala;
- Sakit kerongkong;
- Muntah;
- Cirit birit;
- Ruam;
- Gejala pendarahan.

Anda adalah dinasihatkan untuk:

- Mengamalkan tahap kebersihan diri yang tinggi seperti kerap mencuci tangan dengan menggunakan sabun dan air atau bahan pencuci tangan (*hand sanitizer*);
- Menghadkan pergaulan dengan individu sihat di sekeliling anda, sekiranya anda mula bergejala.

Kepada Pengamal Perubatan Yang Merawat Pesakit Ini:
Individu yang membawa kad ini adalah merupakan pengembara atau anak kapal yang baru pulang dari negara-negara yang aktif dengan penularan EVD. Jika anda mendapati beliau memenuhi kriteria gejala-gejala seperti di atas, sila hubungi talian berikut dengan **kadar segera** untuk mendapatkan nasihat berkaitan rujukan ke hospital. Pengamal Perubatan perlu memastikan langkah-langkah pencegahan dan kawalan infeksi yang optimum diamalkan setiap masa.

- 03-8881 0300 :
  - Isnin hingga Jumaat (8: 00 pagi hingga 5:00 petang);
- 013-6699 700 :
  - Isnin hingga Jumaat (sebelum pukul 8:00 pagi / selepas pukul 5:00 petang);
  - Sabtu dan Ahad (termasuk cuti umum).

'Annex 23B'

HEALTH ALERT CARD
FOR TRAVELLERS AND CREWS ARRIVING FROM COUNTRIES AFFECTED BY EBOLA VIRUS DISEASE (EVD)

Keep this card for the next 21 days upon returning to Malaysia. Monitor your health status and seek medical attention **immediately** from the nearest health facility for further assessment if you have symptoms as below:

- Fever (>38.6°C);
- Intense weakness;
- Lethargy
- Muscle pain;
- Headache;
- Sore Throat;
- Vomiting;
- Diarrhoea;
- Rash;
- Unexplained bleeding.

You are advised to practice the following:

- Maintain good personal hygiene such as frequent hand washing with soap and water or use hand sanitizer regularly;
- Limit contact with healthy individuals around you, once you are symptomatic.

Attention To The Doctor Who Is Attending To This Patient:
The person who is presenting this card to you had recently arrived from countrie/s with active transmission of EVD. If the person presents with symptoms as above, please call the following number **immediately** for advice on referral. Attending doctors are advised to maintain optimum infection prevention and control measures at all times.

- 03-8881 0300 :
  - Monday to Friday (8: 00 am - 5:00 pm);
- 013-6699 700 :
  - Monday to Friday (before 8:00 am / after 5:00 pm);
  - Saturday and Sunday (including public holidays).

‘**Annex 24**’

TATACARA BAGI MENJALANKAN PEMANTUAN AKTIF UNTUK TEMPOH 21 HARI KHUSUS TERHADAP INDIVIDU YANG MELAPORKAN / DIDAPATI TERGOLONG DALAM KATEGORI RISIKO PENDEDAHAN BERSTATUS ‘*NO / LOW / SOME RISK*’

Sebagai panduan, berikut adalah tatacara bagi melaksanakan aktiviti pemantauan aktif tersebut:

a) Aktiviti pemantauan aktif untuk tempoh 21 hari (iaitu dari tarikh meninggalkan negara yang terlibat) adalah meliputi mana-mana individu yang melaporkan / didapati tergolong dalam kategori risiko pendedahan berstatus ‘*no / low / some risk*’.

b) Pemakluman mengenai individu yang memerlukan pemantauan aktif ini mungkin diperolehi oleh pihak CPRC Kebangsaan secara harian melalui maklumat yang diterima olehnya dari pihak Pintu Masuk Antarabangsa Negara atau mungkin juga secara terus dari pihak Pintu Masuk Antarabangsa Negara sendiri. Begitu juga, maklumat mungkin diperolehi hasil akviti pengesanan kontak bagi kes yang disahkan dijangkiti EVD

c) Seterusnya, ahli *Rapid Response Team* (RRT) / *Rapid Assessment Team* (RAT) dari Pejabat Kesihatan Daerah yang terlibat hendaklah mengaturkan temujanji untuk bertemu dengan individu terbabit di alamat tempat tinggal yang diberikan.

d) Semasa sesi pertemuan tersebut, sila berikan penjelasan ringkas kepadanya mengenai penyakit EVD meliputi tanda dan gejala jangkitan serta nasihat kesihatan yang berkaitan. Bersedia untuk menjawab sebarang pertanyaan mengenai EVD yang mungkin diajukan oleh individu terbabit. Bekalkannya dengan dokumen-dokumen yang berikut sebagai rujukan:

   - Risalah mengenai penyakit EVD;

   - Borang Pemantauan Harian EVD (sila rujuk **‘Annex 29A / 29B’**) – pastikan ianya mengandungi nombor telefon yang boleh dihubungi oleh individu yang dipantau pada bila-bila masa (iaitu tersedia sepanjang tempoh 24 jam sehari). Ini bagi membolehkan tindakan segera diambil sekiranya beliau bergejala.

e) Begitu juga, semasa sesi pertemuan tersebut maklumkan kepada individu berkenaan bahawa dia akan dihubungi / dilawati secara berkala (sebagai contohnya 3 hari sekali) oleh anggota PKD bagi memantau tahap kesihatannya, yang antara lain akan bertanyakan mengenai sebarang gejala

yang mungkin dialami. Seterusnya, jelaskan secara ringkas apa yang perlu dia lakukan sekiranya mula mengalami sebarang gejala jangkitan.

f) Jika pada bila-bila masa sepanjang tempoh 21 hari pemantauan tersebut, individu yang terlibat melaporkan sebarang gejala jangkitan (seperti demam, sakit otot, sakit kepala, sakit tekak, muntah, cirit birit, ruam, kelesuan dan gejala pendarahan), ahli RRT / RAT dari Pejabat Kesihatan Daerah yang terlibat perlu menjalankan pemeriksaan lanjut terhadap pelaporan tersebut.

g) Sekiranya berkenaan, uruskan penghantaran individu terbabit dengan menggunakan *designated ambulance* ke hospital yang telah dikenalpasti. Pastikan kes tersebut telah terlebih dahulu dirujuk kepada Pakar Perubatan Penyakit Berjangkit / Pakar Perubatan hospital berkenaan dan pihak hospital telah bersedia untuk menerimanya. Begitu juga, pastikan notifikasi kes dilakukan secara serentak kepada pihak CPRC Jabatan Kesihatan Negeri (JKN) dan CPRC Kebangsaan.

h) Sekiranya pemantauan aktif secara berkala tidak mengesan sebarang kes yang bergejala, maklumat mengenai status kesihatan individu yang dipantau perlu dilaporkan **secara mingguan** kepada pihak **JKN menjelang pukul 10:00 pagi setiap hari Isnin** (bagi data pemantauan untuk sepanjang tempoh seminggu sebelumnya) untuk dikemukakan kepada pihak **CPRC Kebangsaan menjelang pukul 12:00 tengahari – hari yang sama** (juga bagi data pemantauan untuk sepanjang tempoh seminggu sebelumnya). Format pelaporan tersebut adalah seperti yang dinyatakan pada **‘Annex 30’**.

TATACARA PENGURUSAN INDIVIDU YANG MELAPORKAN / DIDAPATI TERGOLONG DALAM KATEGORI RISIKO PENDEDAHAN BERSTATUS TINGGI

Kontak kepada kes yang disahkan dijangkiti EVD

Individu yang dikesan melalui aktiviti saringan kesihatan di Pintu Masuk Antarabangsa (PMA)

Kontak kepada kes PUI-EVD di dalam kapal terbang

1) Memaklumkan dan mendapatkan persetujuan dari Pakar Perubatan Penyakit Berjangkit / Pakar Perubatan di peringkat Negeri untuk meletakkannya di bawah Perintah Pengawasan dan Pemerhatian di rumah kediaman (bagi warga tempatan) atau di Pusat Kuarantin (bagi warga asing).
2) Memaklumkan secara pentadbiran kepada semua pihak berikut secara serentak:
   - Pejabat Kesihatan Daerah yang berkaitan;
   - CPRC Jabatan Kesihatan Negeri yang berkaitan;
   - CPRC Kebangsaan.
3) Bagi individu yang dikesan di PMA – penghantaran ke Pusat Kuarantin / rumah kediaman dengan menggunakan kenderaan khusus yang disediakan oleh Pasukan Kesihatan di PMA.
4) RRT / RAT yang berkenaan bertanggungjawab menguruskan kontak / individu sepanjang tempoh mereka diletakkan di bawah Perintah Pengawasan dan Pemerhatian.

Perintah Pengawasan dan Pemerhatian Di Rumah Kediaman / Pusat Kuarantin

1) RRT / RAT mengemaskini pangkalan data kontak / individu yang terlibat.
2) RRT / RAT menjelaskan kepada kontak / individu mengenai peraturan-peraturan sepanjang tempoh mereka diletakkan di bawah Perintah Pengawasan dan Pemerhatian (**'Annex 26A / 26B'**).
3) Bagi rujukan ke Pusat Kuarantin – RRT / RAT mengaturkan kemasukan individu yang terlibat ke Pusat Kuarantin.
4) RRT / RAT memantau status kesihatan harian individu yang terlibat dengan menggunakan borang seperti di '**Annex 28**'.
5) Pangkalan data kontak / individu yang dikemaskini dengan status kesihatan semasa mereka perlu dihantar ke CPRC JKN dan CPRC Kebangsaan secara harian mengikut ketetapan masa yang dijadualkan (**'Annex 31'**).

- Kontak kepada kes yang disahkan dijangkiti EVD
- Individu yang dikesan melalui aktiviti saringan kesihatan di PMA

Kontak kepada kes PUI-EVD di dalam kapal terbang

Pemantauan sepanjang tempoh 21 hari dari tarikh berlepas daripada negara asal / tarikh akhir pendedahan

POSITIF

Ujian pengesahan kes indeks EVD

NEGATIF

YA

Gejala?

TIDAK

Memaklumkan dan mendapatkan persetujuan dari Pakar Perubatan Penyakit Berjangkit / Pakar Perubatan di peringkat Negeri untuk kemasukan ke wad

Pelepasan dari menjalani Perintah Pengawasan dan Pemerhatian (**'Annex 27A / 27B'**)

KEMENTERIAN KESIHATAN MALAYSIA

Fail Rujukan:

Pejabat Kesihatan Daerah
……
……
……
……
No. Telefon: ……..

Kepada:

Nama: ……..
No. Kad Pengenalan / Pasport: ……..……..
Alamat Pusat Kuarantin / Rumah Kediaman: …….
……
……...

Perintah Pengawasan Dan Pemerhatian Di Pusat Kuarantin / Rumah Kediaman Bagi Jangkitan Penyakit Virus Ebola (*Ebola Virus Disease*; EVD) Di Bawah Seksyen 15(1) Akta Pencegahan Dan Pengawalan Penyakit Berjangkit 1988 (Akta 342)

Tuan / Puan telah dikenalpasti sebagai kontak terdekat kepada seorang yang telah disahkan menghidapi jangkitan EVD / merupakan individu yang melaporkan kategori risiko pendedahan berstatus tinggi bagi jangkitan EVD dan berkemungkinan Tuan/Puan telah terdedah kepada jangkitan tersebut. Seksyen 15(1) Akta Pencegahan dan Pengawalan Penyakit Berjangkit 1988 (Akta 342), memperuntukkan kuasa kepada mana-mana pegawai yang diberikuasa untuk memerintahkan Tuan/Puan diasingkan di Pusat Kuarantin / rumah kediaman berdasarkan kepada keperluan epidemiologi penyakit tersebut.

2. Bagi menjalankan kuasa di bawah Seksyen 15(1) Akta 342, saya ……..., pegawai diberikuasa untuk meletakkan Tuan/Puan di bawah pengawasan dan pemerhatian di Pusat Kuarantin / rumah kediaman seperti alamat di atas dengan syarat-syarat seperti dinyatakan di '**Lampiran A**'.

3. Sepanjang tempoh Tuan / Puan diletakkan di bawah perintah pengawasan dan pemerhatian, Tuan/Puan adalah dikehendaki untuk mematuhi segala perintah yang ditetapkan. Di bawah Seksyen 24 Akta yang sama, kegagalan mematuhi perintah ini, jika disabitkan kesalahan boleh dihukum bagi kesalahan pertama, dipenjara selama tempoh tidak melebihi 2 tahun atau didenda atau kedua-dua sekali, berkenaan dengan kesalahan kedua atau kesalahan berikutnya boleh dipenjara tidak melebihi 5 tahun atau denda atau kedua-duanya; berkenaan dengan kesalahan berterusan, didenda selanjutnya tidak melebihi dua ratus bagi tiap-tiap hari kesalahan ini berterusan.

Pegawai Yang Diberikuasa		
Nama	**:**	
Jawatan	**:**	
Tarikh & Masa	**:**	
Pengesahan Menerima Sesalinan Perintah Oleh Kontak Yang Diletakkan Di Bawah Pengawasan		
Nama	**:**	
No. Kad Pengenalan	**:**	
Tarikh & Masa	**:**	
Tandatangan	**:**	

‘**Lampiran A**’

Perintah Pengawasan Dan Pemerhatian Di Pusat Kuarantin / Rumah Kediaman Bagi Jangkitan Penyakit Virus Ebola (*Ebola Virus Disease*; EVD) Di Bawah Seksyen 15(1) Akta Pencegahan Dan Pengawalan Penyakit Berjangkit 1988 (Akta 342)

Tindakan Yang Perlu Dilakukan Semasa Dalam Tempoh Pengawasan Dan Pemerhatian

A. Tinggal Di Pusat Kuarantin / Rumah Kediaman Beralamat Di Atas

i. Hendaklah tinggal di Pusat Kuarantin / rumah kediaman seperti di alamat yang dinyatakan di atas sepanjang masa bermula dari tarikh …….. hingga ……..
ii. Pada setiap masa, para penghuni di Pusat Kuarantin / rumah kediaman adalah dikehendaki untuk menjarakkan diri sekurang-kurangnya 1 meter antara satu sama lain.
iii. Jika anda memerlukan bantuan mengenai keperluan peribadi, sila maklumkan kepada *Rapid Response Team* (RRT) / *Rapid Assessment Team* (RAT) yang berkenaan.
iv. Jika anda terpaksa meninggalkan Pusat Kuarantin / rumah kediaman atas sebab-sebab kecemasan, sila dapatkan persetujuan daripada Pegawai Kesihatan Daerah yang berkenaan.
v. Seboleh-bolehnya, elakkan daripada menerima sebarang pelawat sepanjang tempoh berada di Pusat Kuarantin / rumah kediaman.
vi. Sekiranya saudara mara, sahabat handai datang menziarahi, anda adalah dikehendaki untuk menjarakkan diri sekurang-kurangnya 1 meter antara satu sama lain. Seterusnya, adalah menjadi tanggungjawab anda untuk mencatatkan nama, nombor telefon dan tarikh kunjungan mereka.
vii. Bagi individu yang diletakkan di bawah perintah pengawasan dan pemerhatian di rumah kediaman:
    - Pasangan, anak-anak, adik beradik atau mana-mana individu lain yang tinggal serumah tetapi TIDAK dikenakan perintah pengawasan dan pemerhatian di rumah adalah BEBAS untuk melakukan aktiviti seharian mereka.

B. Periksa Gejala Jangkitan

i. Sila berikan kerjasama kepada RRT/RAT yang akan menjalankan pemeriksaan kesihatan pada setiap hari.
ii. Penutup mulut dan hidung (*mask*) hendaklah dipakai sepanjang masa jika anda demam atau mengalami sebarang gejala lain sebelum anda dipindahkan ke hospital untuk menerima rawatan lanjut.

iii. Jika anda mengalami mana-mana gejala dan tanda seperti berikut, **SEGERA** hubungi Pegawai Kesihatan Daerah di nombor telefon: …….. untuk tindakan selanjutnya:

- Demam;
- Sakit kepala;
- Sakit sendi;
- Sakit otot;
- Kelesuan;
- Muntah;
- Cirit birit;
- Ruam;
- Pendarahan.

C. Amalkan Kebersihan Diri

i. Sentiasa amalkan tahap kebersihan diri yang tinggi seperti kerap mencuci tangan dengan menggunakan air dan sabun atau bahan pencuci tangan (*hand sanitizer*).

D. Perkara-perkara Yang Dilarang

i. Menanggalkan penutup mulut dan hidung (*mask*) apabila dikunjungi oleh saudara mara atau sahabat handai.
ii. Meninggalkan Pusat Kuarantin / rumah kediaman seperti beralamat di atas tanpa memaklumkan kepada Pegawai Kesihatan Daerah terlebih dahulu.
iii. Bagi penghuni di Pusat Kuarantin:
    - Menganggu ketenteraman penghuni lain di Pusat Kuarantin berkenaan.
    - Merokok, minum minuman keras, mengambil dadah dan lain-lain sepanjang tempoh berada di Pusat Kuarantin.

PERINGATAN

Pemeriksaan mengejut akan dilakukan bagi memastikan perintah-perintah di atas dipatuhi dan kegagalan mematuhi perintah-perintah di atas boleh menyebabkan tindakan mahkamah dikenakan ke atas Tuan / Puan.

MINISTRY OF HEALTH MALAYSIA

Our Ref.:

District Health Office
……
……
……
……
Telephone No: ……..

To:

Name: ……..
Identification Card / Passport No: ……..……..
Quarantine Station / Home Address: ……
……
……...

Order For Supervision And Observation At Quarantine Station / Home For Ebola Virus Disease (EVD) Under Section 15(1) Prevention And Control Of Infectious Disease Act 1988 (Act 342)

You had been identified as contact to a confirmed case of EVD infection / reporting high risk exposure category for EVD infection. As such, there's possibility that you may have been exposed to EVD infection. Under Section 15(1) Prevention and Control of Infectious Diseases Act 1988 (Act 342), an authorized officer may order you to be isolated at a Quarantine Station / home based on epidemiological needs of the said infection.

2. To carry out the order under section 15(1) Act 342, I ……..……..., the authorized officer hereby place you under the order for supervision and observation at Quarantine Centre / home as per address above with conditions as set out in '**Appendix A**'.

3. During the specified duration that you're placed under supervision and observation, you are required to comply with the order prescribed. Under Section 24 of the same Act, failure to comply with this order, if convicted; in respect of a first offence, to imprisonment for a term not exceeding two years or to fine or both; in respect of a second or subsequent offence, to imprisonment not exceeding five years or to fine or both; in respect of a continuing offence, to a further fine not exceeding two hundred ringgit for every day during which such offence continues.

The Authorized Officer		
Name	**:**	
Designation	**:**	
Date & Time	**:**	
Confirmation On Receiving A Copy Of The Order By The Individual Placed Under Supervision		
Name	**:**	
IC / Passport No.	**:**	
Date & Time	**:**	
Signature	**:**	

‘**Appendix A**’

Supervision And Observation Order At Quarantine Station / Home For Ebola Virus Disease (EVD) Under Section 15(1) Prevention And Control Of Infectious Disease Act 1988 (Act 342)

Actions To Be Adhered To During The Supervision And Observation Period

A. Stay In Quarantine Station / Home As Per Address Above

i. Mandatory to stay at the Quarantine Station / home as per address above starting from ……. till …… at all time.
ii. At all time, all occupants of the Quarantine Station / home are required to maintain a distance of at least 1 meter from each other.
iii. If you need help with personal needs, please notify the Rapid Response Team (RRT) / Rapid Assessment Team (RAT) concerned.
iv. If you have to leave the Quarantine Station / home for emergency reasons, kindly get approval from the District Health Officer concerned.
v. As possible, avoid receiving visitors during the entire period of being placed under supervision and observation order.
vi. If relatives, friends come to visit, you are required to maintain distance at least 1 meter from each other. Besides, it is your responsibility to register their name, telephone number and date of their visit.
vii. For individual that is put under supervision and observation order at home:
    - The spouse, children, siblings and any other dwellers in the same house who are NOT subjected under similar order are FREE to continue with their daily routine.

B. Observation Of Infection Symptoms

i. Please give full cooperation to the RRT / RAT conducting health checks on a daily basis.
ii. Face mask must be worn at all time if you have a fever or experiencing any other symptoms while waiting for transfer to the identified hospital.
iii. If you are experiencing any of the following symptoms, **IMMEDIATELY** inform the District Health Officer concerned at this telephone number:…….. for further management:
    - Fever;
    - Headache;
    - Joint ache;
    - Muscle ache;
    - Intense weakness;
    - Vomiting;

- Diarrhoea;
- Rashes;
- Unexplained bleeding.

C. Maintain Personal Hygiene

i. Maintain good personal hygiene such as frequent hand washing with soap and water or hand sanitizer.

D. Prohibited Matters

i. Removal of face mask when visited by relatives or friends.
ii. Leaving the Quarantine Station / home as per address above without informing the District Health Officer in advance.
iii. For residence of the Quarantine Station:
    - Disturbing the peace of other residents at the Quarantine Station.
    - Smoking, alcohol consumption, drug abuse and others during the entire stay at the Quarantine Station.

WARNING

Checks will be conducted from time to time to ensure that the above mentioned commands are complied with and failure to comply with these commands may subject you to be imposed with court action.

KEMENTERIAN KESIHATAN MALAYSIA

Fail Rujukan:

Kepada:

Nama: ……..……..
No. Kad Pengenalan / Passport: ……..
Alamat: ……..……
……
……
……

Pelepasan Dari Menjalani Perintah Pengawasan Dan Pemerhatian Di Pusat Kuarantin / Rumah Kediaman Bagi Jangkitan Penyakit Virus Ebola (*Ebola Virus Disease*; EVD) Di Bawah Seksyen 15(1) Akta Pencegahan Dan Pengawalan Penyakit Berjangkit 1988 (Akta 342)

Dengan segala hormatnya perkara di atas adalah dirujuk.

2. Terdahulu, Tuan / Puan telah dikenalpasti sebagai kontak terdekat kepada seorang yang telah disahkan menghidapi jangkitan EVD / merupakan individu yang melaporkan kategori risiko pendedahan berstatus tinggi bagi jangkitan EVD dan Tuan / Puan telah dikenakan Perintah Pengawasan Dan Pemerhatian di Pusat Kuarantin sebagaimana yang tertakluk di bawah Seksyen 15(1) Akta Pencegahan dan Pengawalan Penyakit Berjangkit 1988 (Akta 342) bermula dari ……. hingga ……..

3. Hasil pemeriksaan yang dijalankan oleh pihak kami mendapati status kesihatan Tuan / Puan adalah memuaskan. Oleh itu, Tuan / Puan adalah diberikan pelepasan dari menjalani pemerhatian dan pengawasan di bawah Akta 342, bermula dari tarikh seperti tersebut di bawah.

4. Kerjasama yang telah diberikan oleh Tuan / Puan berhubung perkara ini sepanjang tempoh masa yang ditetapkan adalah amat dihargai dan didahului dengan ucapan terima kasih.

Sekian.

Pegawai Yang Diberikuasa		
Nama	**:**	
Jawatan	**:**	
Tempat Bertugas & No. Telefon	**:**	
Tarikh & Masa	**:**	

MINISTRY OF HEALTH MALAYSIA

Our Ref.:

To:

Name: ……..……..
Identification Card / Passport No: ……..
Address: ……..……
……
……
……

Release From Undergoing Supervision And Observation Order At Quarantine Station / Home For Ebola Virus Disease (EVD) Infection Under Section 15 (1) Prevention And Control Of Infectious Disease Act 1988 (Act 342)

The aforementioned matter is referred with due respect.

2. You were identified as contact to a confirmed case of EVD infection / reported high risk exposure category for EVD infection and you had been imposed under Supervision And Observation Order at Quarantine Station / home under Section 15 (1) Prevention And Control Of Infectious Disease Act 1988 (Act 342) starting from …… till …….

3. Based on examinations conducted by our staff, your health status was found to be satisfactory. Therefore, you are hereby given the relief from undergoing supervision and observation under Act 342, starting from the date as indicated below.

4. Cooperation given by you with regards to this matter during the specified period is greatly appreciated and is preceded with thank you.

Regards,

The Authorized Officer		
Name	**:**	
Designation	**:**	
District Health Office	**:**	
Telephone No.	**:**	
Date & Time	**:**	

'Annex 28'

PENYAKIT VIRUS EBOLA (*EBOLA VIRUS DISEASE*; EVD): BORANG PENGESANAN DAN PEMANTAUAN KONTAK

Pejabat Kesihatan Daerah (PKD):			
Nama Kes Indeks: (Kes Yang Disahkan Dijangkiti EVD)			
Nama Kontak:			Jantina: Lelaki / Perempuan
Alamat Rumah Kontak:			
No. Telefon Kontak:	a) Bimbit: …… b) Rumah: …..……		
Jenis kontak dengan kes indeks dalam tempoh 21 hari yang lepas:	Tidur di rumah yang sama	Menyentuh cecair badan kes indeks	Kontak fizikal secara langsung
	Pengendalian pakaian atau barangan lain kepunyaan kes indeks	Menghadiri upacara pengebumian kes indeks	Lain-lain (Sila nyatakan): ……..
Tarikh akhir kontak dengan kes indeks:	_____ / _____ / _____ (HH/BB/TT)		

GEJALA JANGKITAN	**TARIKH DAN BILANGAN HARI PENGAWASAN / PEMANTAUAN**																				
	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_	_ /_
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Demam																					
Sakit sendi atau otot																					
Rasa lesu / letih																					
Loya / muntah																					
Cirit birit																					
Sakit kepala																					
Sakit tekak																					
Mata merah																					
Tanda pendarahan																					
Lain-lain (sila nyatakan): ……..																					

'Annex 29A'

EBOLA: Borang Pemantauan Harian

Nama	:	
No. Kad Pengenalan / Passport	:	
No. Telefon	:	Bimbit: ……………….…… Rumah: ….……..……………..
Alamat Tempat Tinggal	:	
Tarikh Tiba Di Malaysia	:	
Tarikh Tamat Pemantauan *(21 hari daripada tarikh meninggalkan negara terjejas)*	:	

Jadual Pemantauan Harian

Arahan:
Bagi sebarang gejala yang dilaporkan, sila tandakan (√) pada ruangan yang berkenaan.

Hari 1	Hari 2	Hari 3	Hari 4	Hari 5	Hari 6	Hari 7
Tarikh: ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...
Gejala: Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )

Hari 8	Hari 9	Hari 10	Hari 11	Hari 12	Hari 13	Hari 14
Tarikh: ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...
Gejala: Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )

Hari 15	Hari 16	Hari 17	Hari 18	Hari 19	Hari 20	Hari 21
Tarikh: ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...	**Tarikh:** ……/……/…...
Gejala: Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )	**Gejala:** Demam ( ) Sakit kepala ( ) Sakit tekak ( ) Sakit sendi ( ) Sakit otot ( ) Cirit birit ( ) Muntah ( ) Pendarahan ( )

Sebarang pertanyaan, sila hubungi: Pejabat Kesihatan Daerah (PKD) ………………..…...…. di talian: …...………………

'Annex 29B'

EBOLA: Daily Health Status Monitoring Form

Name	:	
Identity Card / Passport No.	:	
Telephone No.	:	Mobile: ………………. ……. …. Home: … … ………..……………..
Address in Malaysia	:	
Date of Arrival in Malaysia	:	
Date of Completion of Active Monitoring *(21 days from leaving the affected countries)*	:	

Table for Daily Health Status Monitoring

Direction:
Please tick (√) the appropriate space.

Day 1	**Day 2**	**Day 3**	**Day 4**	**Day 5**	**Day 6**	**Day 7**
Date: ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….
Symptom: Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )

Day 8	**Day 9**	**Day 10**	**Day 11**	**Day 12**	**Day 13**	**Day 14**
Date: ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….
Symptom: Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )

Day 15	**Day 16**	**Day 17**	**Day 18**	**Day 19**	**Day 20**	**Day 21**
Date: ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….	**Date:** ……./……./…….
Symptom: Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )	**Symptom:** Fever ( ) Headache ( ) Sore throat ( ) Joint pain ( ) Muscle ache ( ) Diarrhoea ( ) Vomiting ( ) Bleeding ( )

Any inquiry, kindly contact: District Health Office ………………… ……………………..…...…. (Tel. No.: …..………………. …)

Aktiviti Pemantuan Aktif Dua Puluh Satu (21) Hari Ke Atas Individu Yang Melaporkan / Didapati Tergolong Dalam Kategori Risiko Pendedahan Berstatus
'*No / Low / Some Risk*'

Bil.	Nama Pelawat	Warganegara	No. Kad Pengenalan / No. Pasport	Jantina	Umur	Sejarah Lawatan Ke Negara Terjejas Dengan Ebola	PMA Berlepas – PMA Tiba	Alamat Di Malaysia	No. Telefon (Di Malaysia)	Tujuan Lawatan Ke Malaysia	Tarikh Bertolak Dari Negara Terjejas	Tarikh Tiba Di Malaysia	Tarikh Tamat Tempoh Pantau 21 Hari	Sejarah Risiko Pendedahan Kepada Ebola (YA / TIDAK)	Statsus Kesihatan Pada Permulaan Pemantauan Aktif	Pejabat Kesihatan Daerah (PKD) Pemantau	* Status Pemantauan (Mengikut bilangan hari pemantauan & tarikh)																			Catatan
																	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	H16	H17	H18	H19	H20	H21	
																	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	(Tarikh)	

*** Status Pemantauan:**

a) Sihat = S
b) Tidak sihat = TS
c) Tidak dapat diihubungi = TDH

Sekiranya pemantauan aktif secara berkala tidak mengesan sebarang kes yang bergejala, maklumat mengenai status kesihatan individu yang dipantau perlu dilaporkan secara mingguan kepada pihak CPRC Jabatan Kesihatan Negeri (JKN) menjelang pukul 10:00 pagi setiap hari Isnin (bagi data pemantauan untuk sepanjang tempoh seminggu sebelumnya) untuk dikemukakan kepada pihak CPRC Kebangsaan menjelang pukul 12:00 tengahari – hari yang sama (juga bagi data pemantauan untuk sepanjang tempoh seminggu sebelumnya).

Disediakan oleh:	**Disemak oleh:**
Nama: Jawatan: Tarikh:	Nama: Jawatan: Tarikh:

NOTA:
Templat ini hanya sebagai rujukan sahaja bagi menyenaraikan butiran yang perlu direkodkan dari setiap pelawat yang dipantau. Sila ambil maklum bahawa terdapat ruangan yang terhad dalam helaian kertas ini yang menyebabkan sebahagian besar ruang input maklumat adalah terlalu kecil. Justeru, adalah disarankan agar pangkalan data dalam format yang bersesuaian diwujudkan di setiap peringkat yang terlibat.

Aktiviti Pemantuan Aktif Dua Puluh Satu (21) Hari Ke Atas Individu Yang Diletakkan Di Bawah Arahan Pengawasan Dan Pemerhatian Di Pusat Kuarantin / Rumah Kediaman

Bil.	Nama Individu	Warganegara	No. Kad Pengenalan / No. Pasport	Jantina	Umur	* Kategori Risiko	Nama Kes Indeks	Hubungan Kepada Kes Indeks	Alamat Di Malaysia	No. Telefon (Di Malaysia)	Tujuan Lawatan Ke Malaysia	Tarikh Bertolak Dari Negara Terjejas	Tarikh Tiba Di Malaysia	Tarikh Tamat Tempoh Pemantauan	Statsus Kesihatan Pada Permulaan Pemantauan Aktif	Pejabat Kesihatan Daerah (PKD) Pemantau	** Status Pemantauan (Mengikut bilangan hari pemantauan & tarikh)																			Catatan
																	H1 (Tarikh)	H2 (Tarikh)	H3 (Tarikh)	H4 (Tarikh)	H5 (Tarikh)	H6 (Tarikh)	H7 (Tarikh)	H8 (Tarikh)	H9 (Tarikh)	H10 (Tarikh)	H11 (Tarikh)	H12 (Tarikh)	H13 (Tarikh)	H14 (Tarikh)	H15 (Tarikh)	H16 (Tarikh)	H17 (Tarikh)	H18 (Tarikh)	H19 (Tarikh)	H20 (Tarikh)	H21 (Tarikh)	

*** Kategori Risiko:**

a) Kontak kepada kes yang disahkan dijangkiti EVD / kontak kes PUI EVD di dalam kapal terbang = K
b) Individu yang melaporkan tahap pendedahan berisiko tinggi dalam tempoh 21 hari sebelumnya = RT

**** Status Pemantauan:**

a) Sihat = S
b) Tidak sihat = TS

Sekiranya pemantauan aktif yang dilaksanakan tidak mengesan sebarang kes yang bergejala, maklumat mengenai status kesihatan individu yang dipantau perlu dilaporkan secara harian kepada pihak CPRC Jabatan Kesihatan Negeri (JKN) menjelang pukul 10:00 pagi setiap hari untuk dikemukakan kepada pihak CPRC Kebangsaan menjelang pukul 12:00 tengahari hari yang sama.

Disediakan oleh:	**Disemak oleh:**
Nama: Jawatan: Tarikh:	Nama: Jawatan: Tarikh:

NOTA:

Templat ini hanya sebagai rujukan sahaja bagi menyenaraikan butiran yang perlu direkodkan dari setiap individu yang dipantau. Sila ambil maklum bahawa terdapat ruangan yang terhad dalam helaian kertas ini yang menyebabkan sebahagian besar ruang input maklumat adalah terlalu kecil. Justeru, adalah disarankan agar pangkalan data dalam format yang bersesuaian diwujudkan di setiap peringkat yang terlibat.

BORANG SIASATAN EPIDEMIOLOGI
UNTUK KES YANG DISAHKAN DIJANGKITI EBOLA

Individu yang mengisi borang: _____ Wad & Hospital: _____
Maklumat diberikan oleh: _____ R/N: _____
Tarikh kemasukan kes ke wad: _____

RUJUKAN:

Kes dirujuk oleh: RAT / RRT Klinik Kesihatan Lain-lain:

Ahli keluarga yang boleh dihubungi (nama dan nombor telefon): ……

IDENTITI PESAKIT:

Nama:……

Umur: …….. …… Tarikh lahir :……

Jantina: Lelaki / Perempuan Hamil? Ya / Tidak / Mungkin

Warganegara: …… *Pekerjaan: ……

** Jika anggota kesihatan: a) Jawatan: …….. b) Tempat kerja: ……..*

Alamat rumah: ……..

……..

No. Tel: …… No. K/P / No. Pasport: ……

Bermastatutin atau melawat kawasan aktif penularan penyakit Ebola dalam tempoh 21 sebelum bermulanya gejala?
Ya (sila nyatakan: ……) Tidak

MENGHADIRI UPACARA PENGEBUMIAN:

Adakah pesakit telah menghadiri pengebumian dalam tempoh 21 hari yang lepas? Ya Tidak

Adakah pesakit menyentuh atau memanipulasi jenazah / mayat tersebut? Ya Tidak

Nama si mati dan hubungannya dengan pesakit : …… Tarikh pengebumian: ……

RAWATAN PERUBATAN YANG DITERIMA DALAM TEMPOH 21 HARI YANG LEPAS:

Adakah pesakit menerima rawatan perubatan dalam tempoh 21 yang lepas?			Ya Tidak
Tarikh rawatan tersebut diterima oleh pesakit:		_____ / _____ / _____ (HH/BB/TT)	
Apakah jenis rawatan yang diterima?	Suntikan	Ubat pil	Lain-lain (……)
Dimanakah rawatan tersebut diterima?	Hospital	Klinik swasta	Pengamal perubatan tradisional
	(Lokasi:……)		

KONTAK DENGAN KES JANGKITAN EBOLA / ORANG SAKIT:

Adakah pesakit mempunyai kontak dengan kes yang disahkan dijangkiti Ebola atau pesakit yang baru jatuh sakit?
Ya Tidak

Nama pesakit	Hubungan	Tarikh kontak	Gejala-gejala	Jenis kontak

KONTAK DENGAN HAIWAN YANG MATI ATAU SAKIT (CTH. CIMPANZI, MONYET, KELAWAR BUAHAN):

Adakah pesakit mempunyai sebarang kontak fizikal dengan primat yang mati atau sakit dalam tempoh 21 hari lepas?
Ya Tidak

Jenis kontak?

Jenis haiwan?

BUTIRAN PENYAKIT SEMASA:

Tarikh mula jatuh sakit?		Tarikh: _____ / _____ / _____	
Adakah mengalami gejala demam?		Ya	Tidak
• Bila bermulanya gejala demam?	Tarikh: ____ / ____ / _____	Berapa hari?	……..
Adakah mengalami gejala muntah?		Ya	Tidak
Adakah mengalami gejala cirit birit?		Ya	Tidak
Adakah mengalami gejala pendarahan?		Ya	Tidak
• Bila bermulanya gejala pendarahant?	Tarikh: ____ / ____ / _____	Berapa hari?	……..

Jika terdapat perbezaan masa antara bermulanya gejala dan mendapatkan rawatan perubatan, sila nyatakan sebabnya:

GEJALA JANGKITAN SEMASA:

Demam semasa kemasukan ke wad?	Ya	Suhu direkodkan: ……^{o}C	Tidak
(A) <u>Gejala Tanpa Pendarahan:</u>			
Sakit kepala	Ya	Berapa hari? ……	Tidak
Sakit otot atau sendi	Ya	Berapa hari? ……	Tidak
Sakit perut	Ya	Berapa hari? ……	Tidak
Kelemahan / lesu badan	Ya	Berapa hari? ……	Tidak
Kurang selera makan	Ya	Berapa hari? ……	Tidak
Masalah / kesakitan untuk menelan	Ya	Berapa hari? ……	Tidak
Loya	Ya	Berapa hari? ……	Tidak
Muntah	Ya	Berapa hari? ……	Tidak
Cirit birit	Ya	Berapa hari? ……	Tidak
Sesak nafas	Ya	Berapa hari? ……	Tidak
Mata merah	Ya	Berapa hari? ……	Tidak
Ruam tanpa pendarahan	Ya	Berapa hari? ……	Tidak
Sedu (*hiccups*)	Ya	Berapa hari? ……	Tidak

GEJALA JANGKITAN SEMASA:

(B) <u>Gejala pendarahan:</u>

Lebam / pendarahan saluran darah di permukaan kulit	Ya	Berapa hari?	……	Tidak
Pendarahan pada tempat suntikan	Ya	Berapa hari?	……	Tidak
Pendarahan gusi	Ya	Berapa hari?	……	Tidak
Cirit birit dengan najis hitam atau darah merah	Ya	Berapa hari?	……	Tidak
Muntah berdarah	Ya	Berapa hari?	……	Tidak
Pendarahan hidung	Ya	Berapa hari?	……	Tidak
Pendarahan vagina	Ya	Berapa hari?	……	Tidak
Batuk berdarah	Ya	Berapa hari?	……	Tidak

Lain-lain gejala:

Sejarah perubatan lain yang berkaitan:

Catatan:

DIAGNOSA SEMASA KEMASUKAN KE WAD:

Disyaki Dijangkiti EVD (atau PUI-EVD) Berkemungkinan Dijangkiti EVD Disahkan Dijangkiti EVD

*Bukan kes jangkitan EVD

**Jika bukan kes Ebola, diagnosa sementara yang diberikan? ……..……...*

ANGGOTA KESIHATAN YANG MEMPUNYAI POTENSI PENDEDAHAN KEPADA KES DI FASILITI TERLIBAT:

Nama	Jenis pekerjaan	Lokasi kerja	Tarikh pendedahan*	Jenis kontak**

** Senaraikan semua, gunakan helaian tambahan jika perlu.*

*** Dengan persekitaran pesakit mahupun dengan spesimen klinikal kepunyaan pesakit.*

UJIAN MAKMAL YANG DIJALANKAN:

Tarikh	Jenis sampel	Jenis ujian	Keputusan

DIAGNOSA AKHIR: ……

OUTCOME:

Meninggal dunia	Sembuh	Dipindahkan	Melarikan diri
Catatan:			

Ringkasan Mengenai Ketetapan Dekontaminasi Dan Pelupusan Sampah Melibatkan Isirumah Yang Mempunyai Salah Seorang Penghuni Disahkan Dijangkiti Ebola

Bil.	Kategori	Situasi	Dekontaminasi & Pelupusan Sampah	Keperluan Latihan & Pemakaian *PPE
1.	Pembersihan oleh para penghuni premis / kediaman	Premis / kediaman di mana penghuni yang disahkan dijangkiti Ebola **hanya** mengalami gejala demam **tanpa** sebarang gejala gastrointestinal (seperti muntah dan cirit birit) dan / atau gejala pendarahan.	• Para penghuni yang lain boleh membersih dan mencuci barangan kes sebagaimana kebiasaannya – iaitu dengan menggunakan bahan pencuci dan / atau disinfektan. • Para penghuni yang lain boleh melupuskan sampah milik kes secara kebiasaannya.	• Tiada latihan dan pemakaian PPE khusus diperlukan. • Ikuti ketetapan yang diberikan oleh produk bahan pencuci yang digunakan.
2.	Pembersihan oleh para anggota kesihatan yang telah dikenalpasti	Premis / kediaman di mana penghuni yang disahkan dijangkiti Ebola mengalami gejala demam **dan turut mengalami** sebarang gejala gastrointestinal (seperti muntah dan cirit birit) dan / atau gejala pendarahan.	• Para penghuni yang lain **tidak boleh** mengendalikan barangan milik kes yang telah tercemar dengan sewenang-wenangnya. • Hubungi pihak Pejabat Kesihatan Daerah yang berhampiran bagi menjalankan aktiviti dekontaminasi yang perlu dilaksanakan.	• Anggota kesihatan yang telah dikenalpasti untuk menjalankan aktiviti dekontaminasi perlu mematuhi tatacara dan pemakaian PPE khusus yang telah ditetapkan (rujuk '**Lampiran 15**').

***PPE:** Personal protective equipment*

Procedure For Premise Disinfection

Premise disinfection must be carried out in a sensitive manner. The process may results in the destruction of some of the residents' belongings and damage to other items may also occur. Clearly explain the procedure to the residents and obtain their agreement.

Objective

- All activities are to be carried out in a safe way.
- Do not touch body fluids or anything that was used by the sick person including bed covers, plate, cup and utensils without wearing appropriate gear.

Individuals Participating

- One of the residents (if they want) and he / she must be properly wearing the recommended personal protective equipment (PPE).
- Disinfection team comprising of at least three (3) individuals i.e. the supervisor and two (2) assisting personnel.
- Nevertheless, one (1) extra personal PPE should always be taken along.

Prepare Strong (1%) And Mild (0.1%) Chlorine Solution

To chlorine solution is to be prepared on the spot. The recommended preparation is using 2.5 gm NaDCC tablet / 1.5 gm chlorine:

Concentration of Disinfectant		**Dilution Method**			**Usage**
		0.5 gm tablet	**1.25 gm tablet**	**2.5 gm tablet**	
10,000 ppm	1%	17 tablets in 0.5 litre (L) of water	14 tablets in 1 L of water	7 tablets in 1 L of water	• Spillage management • Wiping and cleaning of blood / body fluids
1,000 ppm	0.1%	4 tablets in 1 L of water	3 tablets in 2 L of water	4 tablets in 5 L of water	• General cleaning

The Protective Gear To Be Used

- Two (2) pairs of waterproof disposable **gloves** i.e. heavy duty / rubber gloves and nitrile or latex gloves to be used below the rubber gloves.
- Long-sleeved waterproof **gown**. The gown should extend all the way around the body, overlapping in the back. If gown does not reach around your body, use two gowns, the first tied in the front and the second tied in the back.
- **Face protection** i.e. face mask and goggles or face shield.
- Close-toed shoes with booties (shoes coverings).

Points To Note:

- *Put on these items before you start any of the cleaning procedures below.*
- *Once you put your PPE on, the outside of each item is considered potentially contaminated with material that could transmit infection.*

- *To prevent contaminating yourself, you must put on and take off PPE in the correct order as recommended.*
- *If you are concerned that you may have been exposed to body fluids or other materials from an Ebola patient, stop working and immediately wash the affected skin surfaces with soap and water. Affected mucous membranes should be irrigated with copious amount of water or eyewash solution. Contact your supervisor for additional follow-up.*

- *Additional Do's and Don'ts of wearing PPE:*
  - ***Do** change gloves if yours become torn or very dirty; wash hands before putting on new gloves;*
  - ***Do** wash your hands thoroughly with soap and water or an alcohol based hand rub after removing PPE. If hands appear dirty, use soap and water.*
  - ***Don't** touch your face or adjust your PPE with contaminated gloves.*
  - ***Don't** wash or reuse disposable gloves.*

Disinfection Procedures

- First, the supervisor enters and assess the premise – accompanied by one the residents. Both should be dressed in full protective clothing.

- For latrines used by the sick person or blood stains, urine, vomit or stool on the floor:
  - Pour carefully 1% chlorine solution on the latrine and floor using a cup or a bottle and let it sit for 15 minutes. Sprayers should not be used to avoid formation of droplets.
  - If floor is visibly soiled with body fluids such as blood, urine, vomit or stool, then use a towel to cover the soiled area and pour 1% chlorine solution on top of the towel to avoid splashes or dispersion of body fluids. Let the towel with chlorine solution on the surface for 15 minutes.
  - Remove dirty towel after 15 minutes and dispose in a plastic bag.
  - Clean and remove remaining chlorine solution using a towel or absorbent fabric soaked with 1% chlorine solution.
  - Do not touch any spills of body fluids. Use a wooden stick to clean the floor using the towel or absorbent fabric soaked with 1% chlorine solution.
  - Rinse the floor and latrine with water and soap to reduce chlorine residues.
  - Dispose all dirty towels / fabrics in a plastic bag containing the dirty towels / fabrics.
  - If chlorite granules (i.e. stabilised chlorine bio-spill absorbent) were to be used – covers the spills with absorbent paper towels, liberally sprinkle the chlorite granules and left for a minimum for 2 minutes before scoping the crystalized spills. Discard both the paper towels and the crystalized spills into a biohazard plastic bag and clean the area again with 1% chlorine solution.

- For clothes, linens, towels and mattress that were in contact with the sick person:
  - Throw linens, towels or clothes that are visibly soiled with blood, vomit, urine or stool away in a plastic bag to be burned.

- Put linens, towels or clothes that are NOT visibly soiled in a bucket with 0.1% chlorine solution. Let it stay for 30 minutes and then wash normally.
- If mattress is NOT covered with plastic sheeting, then pour 1% chlorine solution on mattress and wrapped it in plastic sheeting – to be burned along with other items identified.
- If mattress is covered with plastic sheeting, then pour 1% chlorine solution on the plastic sheeting, let the solution sit for 15 minutes, remove solution with towel and then wash the plastic sheeting normally.

- For plates, utensils and cups that were used by the sick person:
  - Remove all plates, cups and utensils used by the sick person.
  - Throw away left over food in a plastic bag.
  - Wash plates, cups and utensils with clean water and soap.
  - Rinse plates, cups and utensils with 0.1% chlorine solution and let them air-dry.

- For general cleaning of surfaces not contaminated with blood or bodily fluids, use wipe downs containing 0.1% chlorine solution.

- Allow surfaces to air-dry before allowing residents to come into their premise.

- Dry sweeping with a broom should never be done. Rags holding dust should not be shaken out and surfaces should not be cleaned with dry rags.

- Cleaning should always be carried out from ‘clean’ areas to ‘dirty’ areas, in order to avoid contaminant transfer.

- Do not spray (i.e. fog) occupied or unoccupied clinical areas with disinfectant. This is potentially dangerous practice that has no proven disease control benefit.

- Took off the PPE in the following order:
  - Shoe coverings (if worn);
  - Outer gloves;
  - Gown;
  - Googles or face shield;
  - Face mask;
  - Inner gloves.

- Wash hands with soap and water immediately after removing PPE or use an alcohol-based hand rub, if soap and water are unavailable.

- After removal of PPE, collect and keep contaminated items in plastic bags until they are disposed of properly. Attach a BIOHAZARD warning label to the outside of the bag. If contaminated items are not dry, they should be placed in a leak-proof bag and double-bag.

Pengurusan Penyakit Virus Ebola (EVD): *Rapid Assessment Team* (RAT) / *Rapid Response Team* (RRT)

1. Ahli Pasukan RAT / RRT Di Peringkat Daerah:

- Pegawai Kesihatan Daerah / Pegawai Epid Daerah / Pakar Perubatan Keluarga (FMS) Daerah – sebagai Ketua Pasukan;
- Penolong Pegawai Kesihatan Persekitaran (PPKP) seramai 2 orang, di mana salah seorang daripadanya adalah PPKP dari Unit Penyakit Berjangkit di peringkat Pejabat Kesihatan Daerah (PKD) terlibat;
- Pembantu Kesihatan Awam; PKA (seorang);
- Pemandu (seorang).

Nota:
Secara prinsipnya, bilangan ahli RAT / RRT yang disarankan adalah sejumlah lima (5) orang. Sekiranya pada bila-bila masa terdapat keperluan untuk melibatkan lebih ramai anggota meliputi lain-lain kategori jawatan yang berkaitan – ianya perlu diputuskan oleh Ketua Pasukan melalui perbincangan yang diadakan.

2. Fungsi Dan Tanggungjawab RAT / RRT Di Peringkat Daerah:

Bil.	Fungsi RAT / RRT	Tanggungjawab
a) Fasa Kesiapsiagaan		
1.	Mengenalpasti ahli RAT / RRT (meliputi ahli tetap dan ahli simpanan).	Ketua Pasukan
2.	Melaksanakan latihan simulasi berkaitan pengurusan EVD di lapangan melibatkan ahli RAT / RRT (meliputi ahli tetap dan ahli simpanan). ***Nota:*** *Latihan simulasi boleh dilaksanakan secara berasingan atau secara bersama dengan pihak RAT / RRT di peringkat Jabatan Kesihatan Negeri masing-masing.*	Ketua Pasukan, PPKP
3.	Memastikan bekalan peralatan perlindungan diri (*personal protective equipment*; PPE) yang mencukupi pada setiap masa dan berada dalam keadaan baik.	PPKP, PKA
4.	Memastikan *designated ambulance / transport* diselenggara secara berkala bagi memastikan ianya berfungsi dengan baik apabila terdapat keperluan pada bila-bila masa.	Pemandu
5.	Pemantuan kesihatan berkala secara aktif ke atas pelawat yang tiba dari negara-negara yang terjejas akibat jangkitan Ebola dan ia tidak terhad kepada mereka yang melaporkan sejarah risiko pendedahan bagi tempoh 21 hari sebelumnya sahaja. Pemantauan aktif ini dilaksanakan untuk tempoh 21 hari, iaitu dari tarikh meninggalkan negara yang terlibat. ***Nota:*** *Pemakluman mengenai pelawat yang memerlukan pemantauan aktif ini diterima dari pihak CPRC Kebangsaan secara berkala (sekiranya berkenaan) melalui maklumat yang diterima olehnya dari pihak Pintu Masuk Antarabangsa Negara.*	RRT

6.	Pemantuan kesihatan harian ke atas individu yang melaporkan tahap pendedahan berisiko tinggi (yang dikesan di peringkat Pintu Masuk Antarabangsa Negara), yang seterusnya ditempatkan di Pusat Kuarantin yang dikenalpasti. ***Nota:*** *Pemakluman mengenai pelawat yang memerlukan pemantauan aktif ini diterima dari pihak CPRC Kebangsaan secara berkala (sekiranya berkenaan) melalui maklumat yang diterima olehnya dari pihak Pintu Masuk Antarabangsa Negara.*	RRT
b) Fasa Respons		
1.	Susulan pengesanan **kes PUI-EVD**: • Mendapatkan butiran lanjut bagi kes PUI-EVD melalui maklumat yang direkodkan oleh pihak hospital yang merawat. • Mengesan kontak rapat kes tersebut bagi mendapatkan maklumat lanjut dari mereka, khususnya jenis kontak yang wujud di antara mereka dengan kes. • Mewujudkan pangkalan data kontak kes meliputi anggota kesihatan yang terlibat secara langsung dalam pengendalian kes PUI-EVD di hospital yang telah dikenalpasti. • Memberikan penjelasan ringkas kepada kontak kes mengenai jangkitan EVD meliputi tanda dan gejala jangkitan serta nasihat kesihatan yang berkaitan. • Bersedia untuk menjawab sebarang pertanyaan mengenai EVD yang mungkin diajukan oleh kontak terbabit. • Membekalkan kontak kes dengan risalah mengenai jangkitan EVD.	RAT
2.	Susulan pengesanan **kes yang disahkan dijangkiti EVD (*confirmed case*)**: • Mendapatkan butiran lanjut bagi *confirmed case* melalui maklumat yang direkodkan oleh pihak hospital yang merawat. • Menjalankan aktiviti pemeriksaan dan disinfeksi premis di mana kes tinggal sepanjang tempoh beliau bergejala, sejurus selepas kes disahkan dijangkiti EVD. • Mewujudkan pangkalan data kontak kes meliputi anggota kesihatan yang terlibat secara langsung dalam pengendalian *confirmed case* di hospital yang telah dikenalpasti. • Mengesan kontak rapat kes tersebut (*contact tracing*): - Mengeluarkan arahan pengawasan dan pemerhatian di rumah kediaman / Pusat Kuarantin dan memastikan ianya dipatuhi oleh kontak rapat kes untuk tempoh 21 hari, dari tarikh akhir	RAT / RRT

	pendedahan kepada *confirmed case*. - Memberikan penjelasan ringkas kepada kontak kes mengenai jangkitan EVD meliputi tanda dan gejala jangkitan serta nasihat kesihatan yang berkaitan. - Bersedia untuk menjawab sebarang pertanyaan mengenai EVD yang mungkin diajukan oleh kontak terbabit. - Membekalkannya dengan risalah mengenai jangkitan EVD dan nombor telefon yang boleh dihubungi oleh kontak pada bila-bila masa (iaitu tersedia sepanjang tempoh 24 jam sehari). Ini bagi membolehkan tindakan segera diambil sekiranya beliau bergejala. - Menjalankan pemantuan kesihatan harian ke atas kontak rapat kes yang dikenakan arahan pengawasan dan pemerhatian di rumah kediaman / Pusat Kuarantin untuk tempoh 21 hari, dari tarikh akhir pendedahan kepada *confirmed case*. - Rujukan ke hospital dikenalpasti apabila kontak melaporkan sebarang gejala jangkitan yang berkaitan. • Bagi kontak kes warga tempatan yang dikenakan arahan pengawasan dan pemerhatian di rumah kediaman, penilaian perlu dijalankan oleh pihak RRT bagi melihat kesesuaian penggunaan premis tersebut. Sekiranya hasil penilaian oleh pihak RRT mengenalpasti ciri-ciri berikut (tetapi tidak terhad kepada ciri-ciri yang disenaraikan sahaja), individu tersebut perlu dipindahkan ke Pusat Kuarantin yang berhampiran bagi menjalani arahan pengawasan dan pemerhatian untuk tempoh masa yang dikenalpasti: - Kediaman kontak yang padat dan sesak; - Kediaman kontak yang mempunyai sistem pengudaraan dan pencahayaan yang kurang baik; - Kontak yang berpotensi untuk menghilangkan diri apabila disusuli selanjutnya; atau - Permintaan oleh kontak yang berkenaan untuk beliau ditempatkan di Pusat Kuarantin. • Menyediakan laporan harian yang memperincikan mengenai aktiviti pencegahan dan kawalan yang dijalankan secara harian di lapangan. Seterusnya, laporan harian yang telah disediakan perlu dikemukakan dalam tempoh masa yang ditetapkan kepada peringkat seterusnya (iaitu CPRC Jabatan Kesihatan Negeri dan kemudian kepada CPRC Kebangsaan). • Melaksanakan penilaian risiko (*risk assessment*) ke atas kejadian kecemasan kesihatan awam yang berlaku – iaitu pengesanan kes yang disahkan dijangkiti EVD (*confirmed case*).	RAT / RRT

	• Melaksanakan aktiviti-aktiviti komunikasi risiko yang berkaitan sepanjang tempoh mengendalikan kejadian tersebut.	RAT / RRT
c) Fasa Pemulihan		
1.	Sebaik sahaja tamat 2 tempoh inkubasi (iaitu 42 hari dari tarikh akhir kes yang disahkan dijangkiti EVD dikesan): • Menyediakan laporan akhir yang memperincikan mengenai pengendalian kejadian tersebut, meliputi sebarang kelemahan yang dikenalpasti dan saranan / cadangan yang ingin diketengahkan. Laporan akhir yang telah disediakan perlu dikemukakan dalam tempoh masa yang ditetapkan kepada peringkat seterusnya (iaitu CPRC Jabatan Kesihatan Negeri dan kemudian kepada CPRC Kebangsaan). • Memastikan bekalan peralatan perlindungan diri (*personal protective equipment*; PPE) yang telah digunakan, diganti semula dalam kuantiti yang mencukupi untuk kegunaan pada masa hadapan.	RAT / RRT

3. RRT Di Peringkat Jabatan Kesihatan Negeri (JKN) Dan Ibu Pejabat Kementerian Kesihatan Malaysia

- Keanggotaan, fungsi dan tanggungjawab bagi RRT di peringkat Jabatan Kesihatan Negeri (JKN) Dan Ibu Pejabat Kementerian Kesihatan Malaysia adalah sebagaimana yang digariskan di dalam dokumen *Infectious Diseases Outbreak: Rapid Response Manual* yang pernah dikeluarkan oleh Bahagian Kawalan Penyakit, KKM.

Contact Details of the National Crisis Preparedness & Response Centre (CPRC), Disease Control Division and the State Health Departments

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Ministry of Health Malaysia
Level 6, Block E10, Complex E
62590 WP Putrajaya
Fax No.:03-8881 0400 / 0500
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Telephone No. (After Office Hour):019-315 4610 or 019-220 2637
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(Cc: dr_norhayati@moh.gov.my and drwnoraini@moh.gov.my)

No.	State	No.	State
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3.	The State CDC Officer Kedah State Health Department Simpang Kuala Jalan Kuala Kedah 05400 Alor Setar Kedah Telephone: +604-7741 170 Fax: +604-7742 381 E-mail: cprc_jknkedah@moh.gov.my	4.	The State CDC Officer Pahang State Health Department Jalan IM4, Bandar Indera Mahkota 25582 Kuantan Pahang Darul Makmur Telephone: +609-5707 909 Fax: +609-5707 911 E-mail: cdcpahang@moh.gov.my
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No.	State	No.	State
9.	The State CDC Officer Selangor State Health Department Tingkat 9, 10, 11 & 17, Wisma Sunwaymas Lot 1, Persiaran Kayangan 40100 Shah Alam, Selangor Telephone: +603-5123 7366 Fax: +603-5123 7369 / 29 E-mail: cprc_sel@moh.gov.my	10.	The State Surveillance Officer Sarawak State Health Department Jalan Diplomatik Off Jalan Bako 93050 Kuching Sarawak Telephone: +6082-443 248 Fax: +6082-443 098 E-mail: opsroom_jkns@moh.gov.my
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13.	The State CDC Officer Negeri Sembilan State Health Department Jalan Rasah 70300 Seremban Negeri Sembilan Telephone: +606-7641 326 Fax: +606-7664 804 E-mail: cprcjknns@moh.gov.my	14.	The State CDC Officer Labuan FT Health Department P. O. Box 80832 87018 WP Labuan Telephone: +6087-410 973 Fax: +6087-410 972 E-mail: cdclabuan@moh.gov.my
15.	The State Surveillance Officer Melaka State Health Department Tingkat 3,4 & 5, Wisma Persekutuan Jalan Business City, Bandar MITC 75450 Ayer Keroh Melaka Telephone: +606-2345 999 Fax: +606-2345 959 E-mail: cprcmelaka@moh.gov.my		