



MINISTRY OF HEALTH
MALAYSIA

EVENT-BASED SURVEILLANCE PROTOCOL

Coordinated By:

***Disease Control Division
Ministry of Health Malaysia***

2018



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FOREWORD

Public health nowadays faces various challenges posed by the growth in international trade and travel. Thus, in responding to these challenges, the International Health Regulations (IHR) was revised in 2005. The application of IHR (2005) is no longer limited to infectious diseases but it also includes surveillance for public health events of various origins (e.g. nuclear and chemical) embracing those of unknown origin. As such, a system of organized and rapid capture of information about potential events that poses a risk to public health is crucial to be established, which is known as the event-based surveillance – a sensitive and flexible surveillance system with an early warning function embedded within it.

Hence, to ensure proper implementation of this surveillance system nationwide, the Event-Based Surveillance Protocol was developed. It is hoped that this document will ensure optimal utilization of surveillance, risk assessment and response systems in provision of timely and accurate information which enables an evidence-based approach to decision making for public health action. My deepest gratitude goes to those who have successfully undertaken the development of this protocol, which later made the completion of this document possible.



DATO' DR. CHONG CHEE KHEONG

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1. INTRODUCTION

This protocol serves as a guide to implement Event-Based Surveillance at all levels of healthcare; District, State and National. It can be used both in Health and Hospital settings. Main components of Event-Based Surveillance are outlined, focussing on event detection, event verification and event notification.

The actual management of the events identified is not dealt in depth as it will follow other guidelines outlined earlier.

2. BACKGROUND

Early warning surveillance system is very important for early detection of outbreaks of diseases. A good surveillance system must be comprehensive and sensitive to achieve its objectives. Building this system and to be fully supported and adopted by all players and stakeholders at all level of health services is a challenge. Early warning and response (EWAR) should be an integral part of an existing public health surveillance and response system. It should allow the early detection of any abnormal / unusual occurrence of event so that the event may be verified and confirmed if applicable and measures for its control implemented in a timely manner.

The surveillance and response system should be sensitive and broad enough to allow detection of other public health events, including non-infectious disease events (e.g. chemical and food safety-related events); and flexible enough to be adapted to special situations (e.g. mass casualty, natural disasters). The surveillance and response priorities of each country should be obtained through risk mapping so that any identified needs can be met.

Therefore, Event-Based Surveillance (EBS) plays its role as one of the components within EWAR. Unlike Indicator-Based Surveillance (IBS), EBS is not based on the routine collection of data and automated thresholds for action but rather on the organized and rapid capture of information about events that pose a potential risk to public health. Information may be found in internet-accessible information sources such as news media sites, disease reporting networks, and other ad hoc reports transmitted through formal and informal channels i.e. social media. EBS can provide near real-time data on potential and confirmed disease outbreaks and other public health events. These include events related to the occurrence of disease in humans, such as disease case clusters and events related to potential human exposure (e.g. diseases and deaths in animals; contaminated food or water; and environmental hazards, including chemical, radiological and nuclear incidents).

The IBS and EBS are complementary and both are essential components of national surveillance systems. Surveillance information is used to help risk assessment, which in turn facilitates public health actions. Surveillance, risk assessment and response often require effective multilevel, multidisciplinary and multisectoral coordination.

3. EVENT-BASED SURVEILLANCE

What is Event-Based Surveillance?

Event-Based Surveillance (EBS) is defined as the organized and rapid capture of **information about events** that are potential risk / concern to public health. These are unusual events occurring in the community which may have a known, suspected or possible impact on human health. Consequently, it raises concern, fear and alarm in the community.

Information about events can be captured from rumours and other ad-hoc reports obtained through either; formal channels (established routine reporting systems) or informal channels (media, health workers and non-governmental organisation reports, community and social media).

The events that are potential risk / concern to public health can be related to **occurrence of diseases in humans or hazards originating from other non human sources;**

- 3.1 Examples of events related to **occurrence of diseases** in humans or an occurrence that creates a potential for diseases in humans such as;
 - a. clustered cases of a disease or syndromes,
 - b. unusual disease patterns,
 - c. unexpected deaths (recognized by the community / health workers)

- 3.2 Examples of events related to potential **hazards originating from other non human sources** such as;
 - a. events related to diseases and deaths in animals,
 - b. contaminated food products or water,
 - c. environmental hazards / disasters including chemical and radionuclear events, floods, earthquakes, landslides, etc.

An administrative directive by the Deputy Director-General of Health (Public Health) was issued in January 2014. It was stated that any event (outbreaks / disaster / crisis / public health emergencies) of public health concern or media highlight should be reported immediately through the appropriate channel. The directive was issued following the occurrence of previous instances where there was a delay in notification of public health events to the top management of the Ministry of Health. Often these events were reported much earlier in the media without

the knowledge of the Ministry of Health officials (refer **Annex 1**). This new instruction also refers to an earlier similar directive issued by the Director General of Health in 2006. It was mentioned in the previous directive that all events / outbreaks of infectious diseases should be reported urgently to the Ministry of Health headquarters, through the National Crisis Preparedness and Response Centre (CPRC).

4. OBJECTIVES

4.1 General Objective

To rapidly detect and appropriately respond to acute public health events of any origin, ensuring timely implementation of effective control measures.

4.2 Specific Objectives

- a. To facilitate early detection and early response towards reported events.
- b. To reduce the public health risk and impact of the events.
- c. To complement the indicator-based surveillance and other surveillance systems.

5. PUBLIC HEALTH EVENTS OF CONCERN

Any public health event that raises **concern, fear** and **alarm** in the community. The event may include, but not limited to :

- 5.1 Events which may have a **known, suspected or possible impact on human health and require immediate action** to reduce the consequences, e.g. highly potential for spread and/or high case fatality rates.
- 5.2 Events with **unusual disease patterns**; events arising outside their usual pattern of occurrence.
- 5.3 Events where the **underlying agent**, disease, mode of transmission is new, **newly-discovered** or as yet **unknown** at the time of detection.
- 5.4 Events that **constitute a public health threat (Public Health Emergency of International Concern-PHEIC)** i.e. with severe consequences on trade / travel and related to the intentional release of biological or chemical agents.

6. SOURCE OF EVENT INFORMATION

Information on events can be obtained from various sources; **either from** within the healthcare system or from sources outside the healthcare system. (community, other government or non-government agencies, media, international agencies / organizations)

6.1 Sources within the Healthcare System:

Healthcare system is the main source of morbidity and mortality data. Information can be derived from any personnel in primary healthcare and hospitals (all public healthcare facilities). Event information can also be obtained from the private health sector and from other agencies providing healthcare; eg. military health services, prison health services, health insurance organizations, occupational health services, etc.

a. Healthcare Facilities

Health care workers can be involved as primary reporting source, such as during patient consultation or as receiver of secondary source of rumour picked up through other activities such as home visits or other patient educational programmes.

Outpatient attendances or emergency room admissions may indicate early signal of an unusual event; e.g. clusters of patients presenting with respiratory symptoms secondary to smoke inhalation (following a chemical explosion) or clusters of pneumonia cases, and others.

b. Laboratories

Laboratories constitute a primary source of morbidity data and contribute by confirming the clinical diagnosis for individual patients and identifying specific diagnoses of public health interest. Laboratory personnel may be the first to notice clusters of certain diseases.

c. Death Registers

Death registers may provide an alert signal when a variation is noticed in the number and pattern of deaths.

d. Pharmaceutical Monitoring

A sudden surge in drug consumption patterns evidenced by volume of sale and demand of particular medications may provide an indication of an unusual disease occurrence/spike. Other monitoring may include those related to Adverse Drug Reaction, Antimicrobial Resistance, etc.

6.2 Sources Outside the Healthcare system

a. Community

Events reported from the community may be reported from the general public or through community organizations, i.e. religious organizations, non-governmental organizations, long-term care facilities, public utilities and designated community leaders. Community may report directly to the nearest District Health Office or other government health facilities or to the national hotlines, websites etc.

b. Media and Published Sources

Unusual health events are often reported by the media long before they are detected and reported through the formal surveillance system. Routine active scanning of the media can provide early signals of a public health alert. Establishing a relationship with key media sources and encouraging media professionals to inform key personnel of the Ministry of Health about any unusual events is vital. This is useful for early detection and also for the necessary communications during an outbreak.

Monitoring Online Social Media and Networking Services; i.e Facebook, WhatsApp, Twitter, Instagram, etc is also important for possible early capture and detection of current evolving events. If the incident/event detected is public health related, prompt verification and action is required.

c. Other Agencies at National Level

This includes organizations, such as the Department of Veterinary Services (DVS), Institutions of Higher Learning, Local Authorities, Foreign Missions, and other related entities

d. Regional and International Agencies

There are various sources of information from the regional and international agencies. Monitoring international information on outbreaks and other public health risks that may present a public health concern for those countries and their surrounding region can be done through these sources. Listed below are

some of the reliable and credible sources for such information:

- WHO Event Information Site (WHO EIS) – can be assessed by the National IHR Focal Point.
- WHO disease outbreak news i.e. <http://www.who.int/csr/don/en/index.html> – can be assessed by public.
- ProMED-Mail (Programme for Monitoring Emerging Diseases) i.e. <http://www.promedmail.org> - – can be assessed by public.
- GPHIN (Global Public Health Intelligence Network) - access requires a subscription
- The Information Centre on Emerging Infectious Diseases in the ASEAN Plus Three Countries i.e. <http://www.aseanplus3-eid.info/>
- INFOSAN (International Food Safety Authorities Network) – monitored by the Food Quality and Control Division, Ministry of Health Malaysia.

7. EVENT-BASED SURVEILLANCE : THE COMPONENTS

7.1 Event Detection

Events can be detected at various levels; direct from the community, by the healthcare worker or through media (social media and conventional media).

The community should be aware of what and where to report any event of concern. It is beneficial if suitable arrangements can be made for the community to report to the healthcare facilities, outside clinic hours. Communication from the community should be facilitated to ensure events are detected early so as to enable prompt action.

Healthcare personnel should also be provided training on how and when to report events. They should be able to detect the events through routine clinics / hospital rounds; through rumours; or through complaints/feedback by the community. It is important to alert healthcare personnel at all levels of care to report the events to the higher authorities for event verification. It is important to emphasize that early reporting is very important to effectively manage any such event.

Media screening is another method for event detection. Systematic scanning of printed or electronic media for information on outbreak can be done by the various event assessment teams at the national level, on a daily basis. If funds are available, use of electronic media survey systems for better efficiency can be considered.

7.2 Event Verification

a. Real Event

Event verification is the process by which an event reported, can be substantiated, to confirm whether it is a real event. Real event is more likely if there is one or more 'yes' answer to the questions listed, refer **Table 1**. A real or confirmed event does not necessary mean, however, that the event is a potential risk to public health. Further assessment by the Rapid Assessment Team is needed to confirm it.

Table 1 : Guidance for Event Verification

Question A	
Has the event been reported by an official source? (e.g. local health-care facilities or clinic, public health authorities, animal health personnel)	Yes / No
Has the event been reported by multiple independent sources? (e.g. residents, news media, health-care personnel, animal health personnel)	Yes / No
Does the event description include details about time, place and persons involved? (e.g. After attending a local celebration in community X, six persons are sick and two of them died three days later)	Yes / No
Is the clinical presentation of the cases described? (e.g. from a cluster of seven persons admitted to hospital with atypical pneumonia, two persons have died)	Yes / No
Has a similar event been reported previously? (e.g. with a similar presentation, affecting a similar population and geographical area, over the similar time period)	Yes / No

Adapted from Rapid Risk Assessment of Acute Public Health Events, WHO 2012.

b. Potential Public Health Risk

Assessment whether an event is a potential public health risk is guided by **Annex 2** attached. If it meets at least one of the criteria outlined in **Annex 2**, the event is considered as potential public health risk. The purpose of verifying potential public health event is to determine first important measure in the response. A multidisciplinary approach is required and will include one or a combination of the following:

- Review of the epidemiological data and trend;
- Clinical examination of cases;
- Review of medical records;
- Review of patients' investigations done; eg. laboratory results, x-rays etc.

(Refer **Annex 2** for assessment of potential public health risk in events detected)

7.3 Event Notification

Any designated officer who received the initial report of a public health event at any level of the organisation, either at the District Health Office (District Health Office, District Epidemiologist), State Health Office (State Epidemiologist) or at the Crisis Preparedness and Response Centre (On-call officer) is required to notify the event. (Notification Format is attached as **Annex 3**). Events related to disease outbreak can also be notified through formal online system; **eWabak**.

Reporting for EBS should be made available 24 hours a day, 7 days a week at all levels i.e. District, State and National. Hence, at National level, the point of contact for the EBS is as stated below:

The Surveillance On-Call Officer
 Crisis Preparedness and Response Centre (CPRC)
 Disease Control Division
 Ministry of Health Malaysia
 Level 6, Block E10, Complex E
 62590 PUTRAJAYA
 Telephone: +603-8881 0700 / 0600 / 0200
 Mobile: +6010- 860 8949
 Fax: +603-8881 0400 / 0500
 E-mail: cprc@moh.gov.my / e-wabak@moh.gov.my

For contact details for notification of Public Health Event-Based Surveillance at state level, refer to **Annex 4**.

7.4 Further Action

Upon verification of a real potential public health event, the Rapid Assessment Team (RAT) should also undertake a brief evaluation to assess the severity of the event. Where the need arises, the Rapid Response Team should also undertake an initial literature search, conduct a retrospective review or consult with experts in the field as to the possible nature of the event. This will greatly facilitate subsequent investigation and control activities.

In certain Public Health Events, there may be a need to communicate, collaborate or coordinate with other relevant agencies. Input from Department of Environment, Department of Veterinary Services, National Disaster Management Agency (NADMA), etc may be important especially in non-human health events.

Table 2 : Proposed Action to Be Taken - Following Event Verification

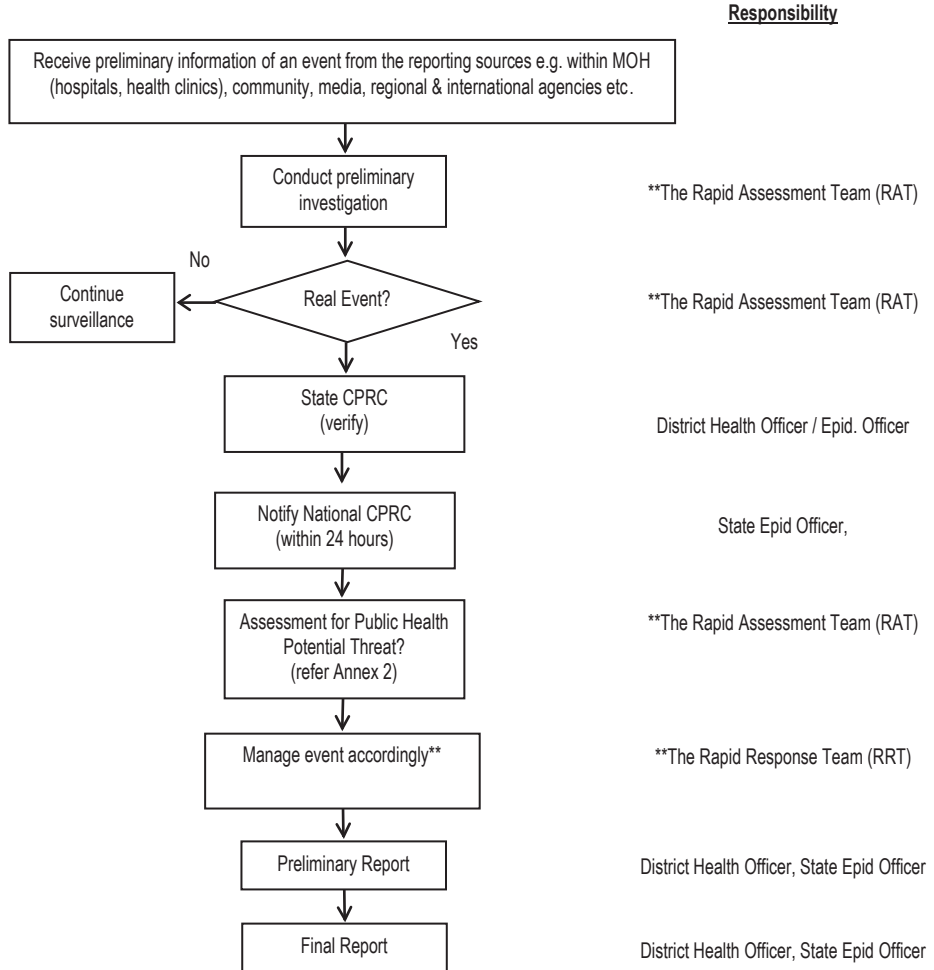
OUTCOME OF TRIAGE AND CONFIRMATION	ACTION
Reported event is proved to be a false rumour	Record the event Risk communication and media communication about the event may be needed to address the public perception of risk (e.g. smallpox rumours)
Event is confirmed but is not an immediate public health risk	Monitor the event and undertake risk assessments as new information becomes available. Risk communication and media communication about the event may be needed to address the public perception of risk

<p>Event is confirmed and may be considered as an immediate public health risk</p>	<p>Undertake a full risk assessment and state the level of confidence in the assessment</p> <p>Provide recommendations for decision-makers, including which actions should be taken and which should have the highest priority (e.g. recommended control measures key communication messages)</p> <p>Undertake additional risk assessments and modify recommendations for decision-makers as new information becomes available. The actions taken as a result of the risk assessments will differ at different organizational levels.</p>
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Adapted from Rapid Risk Assessment of Acute Public Health Events, WHO 2012

The District Medical Officer of Health or the Director of the State Health Department or the Director of Disease Control Division will initiate series of activities pertaining to the event, i.e. field investigation, control measures, risk communication, documentation, multisectoral co-ordination and other actions as needed.

8. THE FLOW-CHART OF PUBLIC HEALTH EVENT-BASED SURVEILLANCE



Note:

- Every event reported should be recorded.
- Risk communication and media communication may be needed to address the public perception of risk
 - To be decided by higher officials of MOH, If the event meets the established criteria for Public Health Emergency of International Concern.
- ** Event management will be handled by the respective team (i.e. RAT/RRT) at district / state / national level based on locality of the event and rising needs.
- Management of the event should follow standard as mentioned in the existing guidelines such as;
 - *Infectious Diseases Outbreak Rapid Response Manual, Disease Control Division, Ministry of Health Malaysia, June 2003*
 - *Standard Operating Procedure for Potential Infectious Diseases, Ministry of Health Malaysia 2004*
 - *Disaster Management Plan / Pelan Pengurusan Bencana Peringkat Kementerian Kesihatan Malaysia 2015*

Figure 3: Flow Chart of Public Health Event-Based Surveillance

9. OVERVIEW OF EVENT MANAGEMENT PROCESS

The overriding goal of an event management is to minimize the public health impact of resulting from the event. Eight principal components of public health event management are:

- a. Preparation
- b. Surveillance
- c. Confirmation and assessment
- d. Event description
- e. Full investigation (including field investigation, analytic epidemiological, environmental and laboratory)
- f. Control measures
- g. Communication
- h. Documentation

Although listed sequentially, in practice these components are often not addressed in this order. Components are interrelated and can be implemented simultaneously. The flow of event management process could be similar to outbreak management process as described in the Infectious Diseases Outbreak Rapid Response Manual, Disease Control Division, Ministry of Health, June 2003.

10. DATA MANAGEMENT AND REPORT

10.1 Data Management

The Rapid Response Team is responsible for collection of relevant data through field investigation. All data collected should be stored safely at the operational room. Personnel in-charge should be appointed to manage all data obtained, at the operational room level; either at the District, State or National CPRC.

This person is responsible for the overall data management of that particular event. Line listing of cases and the epidemic curve should be updated on a daily basis. Data are entered into a computer using the Epi Info software, upon which analysis can be done to generate the information.

Proper documentation of all events detected and the whole process involved in managing the event is very important. Data should also be easily retrievable for further review.

10.2 Final Report

A final report must be produced for every event with potential public health impact, especially when full-scale activities were initiated. The officer responsible for producing the report is as follows:

- a. The District Medical Officer of Health at the District level;
- b. The Director of State Health Department at the State level;
- c. The Director of Disease Control Division at the National level.

The suggested format for the final report is attached as **Annex 5**. The Final Report should be kept safely and available for evaluation when needed.

In order to gain benefit from the final report produced, it should be tabled for discussion at the following platforms:

- a. District / State / National Rapid Response Teams (depending on the nature of the event);
- b. State Epidemiologists Meeting (all relevant parties should be invited)
- c. National Epidemiology Technical Meeting (to be organized by the Disease Control Division and where all relevant parties are invited including clinicians and laboratory personnel).

11. FEEDBACK

Routine feedback is essential in maintaining the EBS. Without relevant and useful feedback, people will stop reporting events. The format for the feedback may vary depending on the audience. The feedback format should be kept simple and adapted to the audience.

Feedback should be sent to the agencies that produced the initial source of event; such as the community, media, allied health care sectors and other organizations (e.g. Veterinary Services Department, Private Laboratory Services, Armed Forces Health Department, Ministry of Education, Institutes of Higher Learning, Non-Governmental Organizations, Foreign Missions, Local Authorities, and other related entities).

The officer who is responsible for producing the feedback will be based on the level of the initial contact:

- The District Medical Officer of Health at the District level;
- The Director of State Health Department at the State level;
- The Director of Disease Control Division at the National level.

The recommended format of the feedback should at a minimum, consist of the following:

- Chronology of the event (Who, What, When, Where, Why, and How);
- A description of the preventive measures and control actions taken;
- Conclusion and recommendation (e.g. current status of the event, lessons learnt etc.);
- Acknowledgement to the reporting sources.

Whereas, for the stakeholders and policy-makers, the following aggregated data could be routinely reported in quarter-yearly bulletins:

- Number of events reported;
- Number of event assessed;
- Number of events confirmed;
- Number of events not confirmed (i.e. false rumours)
- Source of reporting.

When responses to events are undertaken, brief descriptions can be included in the surveillance bulletin to highlight the link between reporting and response.

Feedback should also be available from the National CPRC to the State CPRC and the District Health Office.

12. MONITORING AND EVALUATION OF EVENT-BASED SURVEILLANCE

Routine monitoring of the events detected, verified and responded can be done at any level of the organisation; i.e. at the District, State or Nationally. These can include;

- Number of events detected through the EBS annually;
- Number of events verified & responded through the EBS annually.
- Timeliness of the event notification

At least two events per State per year are evaluated. At each stage the people involved should be interviewed and the performance of the system assessed and recommendations made. By doing so, these key elements are being evaluated:

- Availability of Final Report
- Positive predictive value of the initial event assessments;
- Time from notification to response.

13. REFERENCES

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ACKNOWLEDGEMENT

We would like to acknowledge the invaluable contribution of all officers directly or indirectly involved in the completion of this protocol.



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SENARAI EDARAN

YBhg. Datuk/Dato'/Datu-uan/Puan,

PEMAKLUMAN SEGERA BERKAITAN SEBARANG KEJADIAN WABAK/BENCANA/KRISIS/KECEMASAN KESIHATAN AWAM/ KEJADIAN LUAR BIASA ATAU YANG MENJADI KERESAHAN UMUM DAN PERHATIAN MEDIA

Dengan segala hormatnya saya merujuk kepada perkara di atas adalah berkaitan.

2. Adalah dimaklumkan bahawa, sejak akhir-akhir ini banyak kejadian yang berlaku berkaitan Kementerian Kesihatan Malaysia (KKM) yang menjadi perhatian umum seperti kejadian kebakaran di fasiliti Kerajaan, kejadian kematian yang melibatkan warga asing dan lain-lain. Namun begitu, didapati kejadian yang berlaku ini hanya dimaklumkan kepada CPRC Kebangsaan atau pihak atasan KKM agak lewat. Terdapat kejadian yang berlaku di mana pihak pemberita telah mengetahuinya lebih awal sebelum pihak atasan KKM.

3. Sehubungan itu, saya ingin menarik perhatian YBhg. Datuk/Dato'/Datu/Tuan/Puan, agar dapat merujuk kepada Surat Pekeliling Ketua Pengarah Kesihatan Malaysia Bil.1/2006,, bernombor rujukan (20) dim KKM-171/BKP/SURV/047 bertarikh 25 Mei 2006 (seperti dilampirkan bersama) berkaitan keperluan melaporkan kejadian/wabak penyakit berjangkit dengan kadar segera kepada Ibu Pejabat KKM melalui CPRC Kebangsaan.

4. Selari dengan Surat Pekeliling KPK Bil.1/2006 , YBhg. Datuk/Dato'/Datu/Tuan/Puan adalah dikehendaki memastikan sekiranya berlaku sebarang kejadian wabak penyakit berjangkit atau sebarang kejadian termasuklah bencana/krisis/kecemasan kesihatan awam/kejadian luar biasa atau yang akan menjadi keresahan umum dan perhatian media

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hendaklah dimaklumkan dengan kadar segera kepada CPRC Kebangsaan seperti di talian berikut untuk perhatian dan tindakan selanjutnya;

- i. Telefon (Waktu pejabat): +603-8881 0700/+603-8881 0600.
- ii. No. *handphone* Pegawai Perubatan atas panggilan (Luar waktu Pejabat): +6013-6699700.
- iii. No. faks: +603-8881 0400, +603-8881 0500
- iv. Alamat emel CPRC: cprc@moh.gov.my

5. YBhg. Datuk/Dato'/Datu/Tuan/Puan adalah dipinta untuk memaklumkan perkara di atas kepada anggota di bawah tanggungjawab masing-masing agar memastikan tiada kelewatan dalam makluman kepada Ibu Pejabat KKM berkaitan kejadian wabak penyakit berjangkit atau sebarang kejadian termasuklah bencana/krisis/kecemasan kesihatan awam/kejadian luar biasa atau yang akan menjadi keresahan umum dan perhatian media.

6. Kerjasama YBhg. Datuk/Dato'/Datu/Tuan/Puan dalam memastikan perkara ini dapat dipatuhi adalah amat diharapkan dan terlebih dahulu diucapkan ribuan terima kasih.

Sekian,

"BERKHIDMAT UNTUK NEGARA"

Saya yang menurut perintah,



(DATUK DR. OKMAN HAKIM BIN SULAIMAN
Timbalan Ketua Pengarah Kesihatan (Kesihatan Awam)
Kementerian Kesihatan Malaysia

s.k:

Ketua Pengarah Kesihatan Malaysia

Timbalan Ketua Pengarah Kesihatan (Perubatan)
Kementerian Kesihatan Malaysia

Timbalan Ketua Pengarah Kesihatan (P & ST)
Kementerian Kesihatan Malaysia

Pengarah Bahagian Kawalan Penyakit

Pengarah Bahagian Perkembangan Perubatan

Pengarah Pembangunan Kesihatan Keluarga

Ketua Unit Komunikasi Korporat

SENARAI EDARAN

Pengarah Kesihatan
Jabatan Kesihatan Negeri Selangor

Pengarah Kesihatan
Jabatan Kesihatan Negeri Johor

Pengarah Kesihatan
Jabatan Kesihatan Negeri Pulau Pinang

Pengarah Kesihatan
Jabatan Kesihatan Negeri Pahang

Pengarah Kesihatan
Jabatan Kesihatan Negeri Perak

Pengarah Kesihatan
Jabatan Kesihatan Negeri Perlis

Pengarah Kesihatan
Jabatan Kesihatan Negeri Kedah

Pengarah Kesihatan
Jabatan Kesihatan Negeri Kelantan

Pengarah Kesihatan
Jabatan Kesihatan Negeri Terengganu

Pengarah Kesihatan
Jabatan Kesihatan Negeri Negeri Sembilan

Pengarah Kesihatan
Jabatan Kesihatan Negeri Melaka

Pengarah Kesihatan
Jabatan Kesihatan Negeri Sabah

Pengarah Kesihatan
Jabatan Kesihatan Negeri Sarawak

Pengarah Kesihatan
Jabatan Kesihatan WPKL dan Putrajaya

Pengarah Kesihatan
Jabatan Kesihatan WP Labuan



PEJABAT KETUA PENGARAH KESIHATAN
(OFFICE OF THE DIRECTOR GENERAL OF HEALTH MALAYSIA)
KEMENTERIAN KESIHATAN MALAYSIA
(MINISTRY OF HEALTH MALAYSIA)
BLOK E7 ARAS 12 PARCEL E
PUSAT Pentadbiran Kerajaan Persekutuan
62590 PUTRAJAYA

No Telefon : 03-88832545
No Fax : 03-88895542

Ruj. Kam: (20)dIm.KKM-171/BKP/SURV(047)

Tarikh: 25 Mei 2006

Pengarah Kesihatan Negeri / Wilayah _____

Pengarah
Hospital Kuala Lumpur

Surat Pekeliling Ketua Pengarah Kesihatan Malaysia Bil. 1/2006: Keperluan Melaporkan Kejadian Wabak Penyakit Berjangkit.

1. TUJUAN

Pekeliling ini bertujuan untuk memaklumkan mengenai keperluan bagi melaporkan sebarang sebarang kejadian / wabak penyakit berjangkit terutamanya yang mempunyai potensi untuk menyebabkan keresahan di kalangan orang awam dan menarik perhatian media.

2. LATAR BELAKANG

- 2.1 Dari masa ke semasa kejadian yang luar biasa termasuk kejadian wabak penyakit yang mungkin menarik perhatian orang ramai, akhbar-akhbar atau agensi-agensi lain berlaku di dalam negara kita.
- 2.2 Ada beberapa keadaan di mana Kementerian Kesihatan mendapat maklumat dari pihak akhbar; dan tiada maklumat baru atau pengesahan insiden dapat dibuat oleh Ketua Pengarah Kesihatan atau YB Menteri Kesihatan.
- 2.3 Walaupun sisatan lanjut bagi mendapatkan maklumat sedang dijalankan ke atas kejadian tersebut, 'alert signal' itu perlu disalurkan kepada pegawai atasan yang bertanggungjawab.

3. TAFSIRAN

Kejadian / wabak penyakit berjangkit yang berpotensi menyebabkan keresahan umum dan menarik perhatian media dikategorikan sebagai:

- i. kejadian yang mempunyai morbidity dan mortality yang tinggi.
- ii. kejadian kes yang berkelompok (*cluster*).
- iii. kematian atau kejadian kes (satu atau lebih) akibat penyakit berjangkit yang tidak diketahui patogen penyebab.
- iv. kejadian yang ada kaitan dengan kejadian luar biasa di luar negara.
- v. kejadian yang berkemungkinan berpunca dari ancaman biologi (*bioterrorism*).

4. TANGGUNGJAWAB MELAPORKAN

- 4.1 Tanggungjawab memaklumkan sebarang kejadian / wabak penyakit berjangkit kepada pihak atasan adalah seperti di lampiran 1.
- 4.2 Sekiranya terdapat kes penyakit berjangkit yang berkemungkinan menyebabkan wabak di hospital, pakar perubatan atau pakar kanak-kanak perlulah memaklumkan kepada Pengarah Hospital masing-masing. Sekiranya ada spesimen yang perlu dihantar kepada IMR atau Mkmal Kesihatan Awam (MKAK), pakar perubatan perlulah memaklumkan kepada makmal berkenaan dan mengambil tindakan yang sewajarnya semasa penghantaran spesimen.
- 4.3 Pengarah Hospital seterusnya perlu memaklumkan kepada Pegawai Kesihatan Daerah masing-masing dan mengarahkan pegawai-pegawai yang mengendalikan kes supaya menotifikasikan kes. Pengarah hospital juga perlu memaklumkan kepada Timbalan Pengarah Kesihatan Negeri (Perubatan) masing-masing.
- 4.4 Pegawai Kesihatan Daerah perlu melaporkan terus kejadian wabak kepada Pengarah Kesihatan Negeri dan menyediakan satu laporan awal. Sesalinan laporan berkenaan hendaklah dipanjangkan kepada Timbalan Pengarah Kesihatan Negeri (Kesihatan Awam) dan Pegawai Epidemiologi.
- 4.5 Timbalan Pengarah Kesihatan Negeri (Kesihatan Awam) dan Pegawai Epidemiologi pula bertanggungjawab untuk melaporkan kejadian wabak kepada Timbalan Ketua Pengarah Kesihatan (Kesihatan Awam) dan Pengarah Kawalan Penyakit dan / atau Command Centre Kawalan Penyakit.
- 4.6 Pengarah Kesihatan Negeri akan seterusnya memberi arahan kepada Timbalan Pengarah Kesihatan Negeri (Kesihatan Awam) dan Pegawai Epidemiologi untuk menjalankan verifikasi dan penyiasatan wabak.
- 4.7 Pengarah Kesihatan Negeri juga adalah bertanggungjawab secara terus dan perlu melaporkan kejadian wabak kepada Ketua Pengarah Kesihatan.

- 4.8 Semua kejadian wabak boleh juga dilaporkan terus kepada Command Centre Kawalan Penyakit di talian 03 - 8888 6212 / 6213 atau 013 – 6699700 dan di talian faksimili 03 – 8888 6270.
- 4.9 Walau bagaimanapun, kewujudan carta alir ini tidak menyekat mana-mana pihak untuk mendapat maklumat terus daripada sumber.

5. **TARIKH BERKUATKUASA**

Surat Pekeliling ini berkuatkuasa mulai dari tarikh surat ini dikeluarkan, iaitu pada 25 Mei 2006.

6. **PERTANYAAN**

Sebarang pertanyaan hendaklah dikemukakan kepada:

Pengarah kawalan Penyakit
Bahagian Kawalan Penyakit
Aras 3, Blok E10,
Parcel E, Presint 1,
Pusat Pentadbiran Kerajaan Persekutuan
62590 Putrajaya.
Tel: 03-88834370

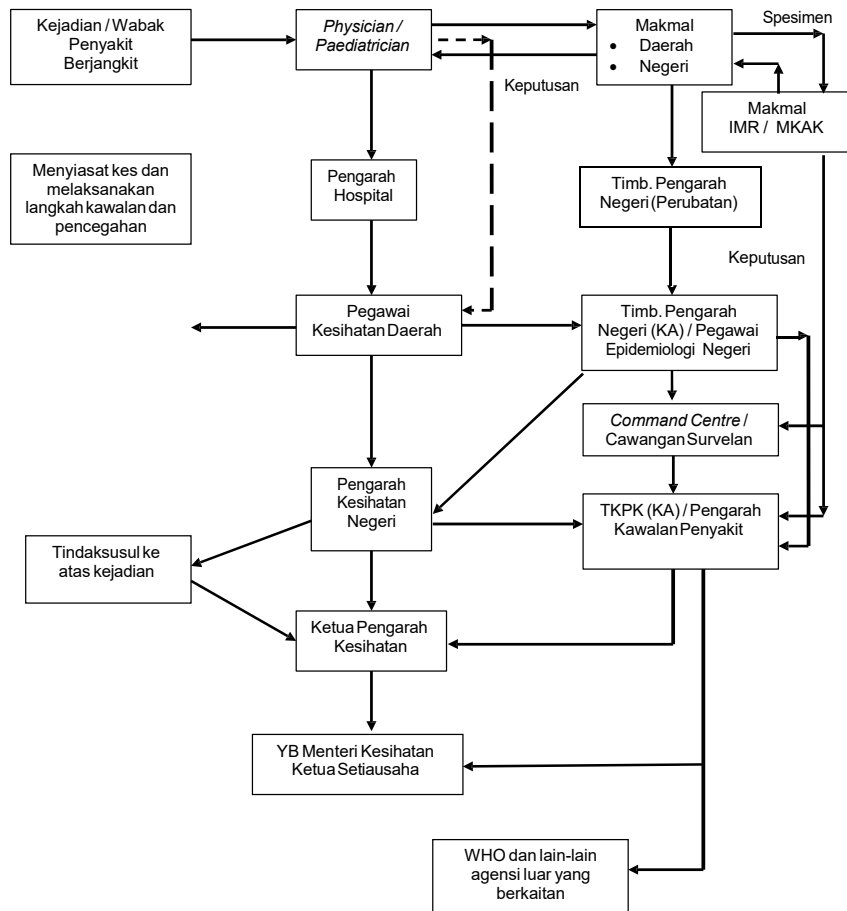
Sekian, terima kasih.

'BERKHIDMAT UNTUK NEGARA'



(DATUK DR. HJ. MOHD ISMAIL BIN MERICAN)
Ketua Pengarah Kesihatan Malaysia

**Carta Alir Penyebaran Maklumat
Kejadian / Wabak Penyakit Berjangkit**



POTENTIAL PUBLIC HEALTH RISK ASSESSMENT FOR EVENTS DETECTED

Examples for the application of the decision instrument for the assessment and notification of events that may constitute a public health concern.

(The examples appearing in this Annex are not binding and are for indicative guidance purposes to assist in the interpretation of the decision instrument criteria)

I. IS THE PUBLIC HEALTH IMPACT OF THE EVENT SERIOUS?

1. Is the number of cases and/or number of deaths for this type of event large for the given place, time or population?
2. Has the event the potential to have a high public health impact?

The following are examples of circumstances that contribute to high public health impact:

- Event caused by a pathogen with high potential to cause epidemic (infectiousness of the agent, high case fatality, multiple transmission routes or healthy carrier).
- Indication of treatment failure (new or emerging antibiotic resistance, vaccine failure, anti dote resistance or failure).
- Event represents a significant public health risk even if no or very few human cases have yet been identified.
- Cases reported among health staff.
- The population at risk is especially vulnerable (refugees, low level of immunization, children, elderly, low immunity, undernourished, etc.).
- Concomitant factors that may hinder or delay the public health response (natural catastrophes, armed conflicts, unfavourable weather conditions, multiple foci in the State Party).
- Event in an area with high population density.
- Spread of toxic, infectious or otherwise hazardous materials that may be occurring naturally or otherwise that has contaminated or has the potential to contaminate a population and/or a large geographical area.

3. Is external assistance needed to detect, investigate, respond and control the current event, or prevent new cases?

The following are examples of when assistance may be required:

- Inadequate human, financial, material or technical resources – in particular:
- insufficient laboratory or epidemiological capacity to investigate the event (equipment, personnel, financial resources);
- insufficient antidotes, drugs and/or vaccine and/or protective equipment, decontamination equipment, or supportive equipment to cover estimated needs;
- existing surveillance system is inadequate to detect new cases in a timely manner.

Is the public health impact of the event serious?

Answer “yes” if you have answered “yes” to questions 1, 2 or 3 above.

II. IS THE EVENT UNUSUAL OR UNEXPECTED?

4. Is the event unusual?

The following are examples of unusual events:

- The event is caused by an unknown agent or the source, vehicle, route of transmission is unusual or unknown.
- Evolution of cases more severe than expected (including morbidity or case- fatality) or with unusual symptoms.
- Occurrence of the event itself unusual for the area, season or population.

5. Is the event unexpected from a public health perspective? The following are examples of unexpected events:

- Event caused by a disease/agent that had already been eliminated or eradicated from the State Party or not previously reported.

Is the event unusual or unexpected?

Answer “yes” if you have answered “yes” to questions 4 or 5 above.

III. IS THERE A SIGNIFICANT RISK OF SPREAD?

6. Is there evidence of an epidemiological link to similar events in other districts / states/ country?

7. Is there any factor that should alert us to the potential for cross border movement of the agent, vehicle or host?

The following are examples of circumstances that may predispose to spread:

- Where there is evidence of local spread, an index case (or other linked cases) with a history within the previous month of:
- Recent travel; local / international (or time equivalent to the incubation period if the pathogen is known);
- Participation in an gathering; local / international (pilgrimage, sports event, conference, etc.); Close contact with a traveller or a highly mobile population.
- Event caused by an environmental contamination that has the potential to spread across borders.
- Event in an area of intense traffic with limited capacity for sanitary control or environmental detection or decontamination.

Is there a significant risk of spread?

Answer “yes” if you have answered “yes” to questions 6 or 7 above.

IV. IS THERE A SIGNIFICANT RISK OF TRAVEL OR TRADE RESTRICTIONS?

8. Have similar events in the past resulted in restriction on trade and/or travel?
9. Is the source suspected or known to be a food product, water or any other goods that might be contaminated that has been exported/ imported to/from other districts / states / country?
10. Has the event occurred in association with a gathering or in an area of intense tourism?
11. Has the event caused requests for more information by officials or media?

Is there a significant risk of trade or travel restrictions?

Answer “yes” if you have answered “yes” to questions 8, 9, 10 or 11 above.

(Note : Adapted from Annex 2, IHR 2005)



**DISEASE CONTROL DIVISION
MINISTRY OF HEALTH
MALAYSIA**

**FORMAT PELAPORAN KEJADIAN BERKAITAN KESIHATAN KE CPRC¹
HEALTH RELATED EVENT REPORTING FORMAT TO CPRC**

Date & Time <i>Tarikh & Masa</i>	:	
What do you want to report? <i>Apa yang anda ingin laporkan?</i> If disaster, is it	:	Kejadian Wabak/ Krisis/ Bencana/ <i>Unknown cause</i> Natural/ MCI/ CBRNe/ Penyakit Berjangkit
What happened? <i>Apa yang telah terjadi?</i>	:	
Please describe how and why? <i>Terangkan bagaimana dan kenapa ia terjadi?</i>	:	
Describe symptoms & onset if related with the event? <i>Jelaskan gejala & onset jika berkaitan dengan kejadian.</i>	:	
When did this happen (date, month, year, time)? <i>Bila peristiwa ini terjadi (tarikh, bulan, tahun, masa)?</i>	:	
Where did this happen? (Village, district, institution, school etc.) <i>Dimanakah ianya terjadi?</i> <i>(Nama kampung, daerah, institusi, sekolah dll.)</i>	:	
Person affected/ infected? <i>Orang yang terlibat?</i>	:	
1)No of victim/ exposed <i>1)Bilangan mangsa/terdedah</i>	:	
2)No of family involved <i>2)Bilangan keluarga terlibat</i>	:	
3)No of sick and Attack Rate <i>3)Bilangan sakit dan kadar serangan</i>	:	

¹ CPRC- means State CPRC and National CPRC or Bilik Gerakan Daerah

4)No of admitted 4)Bilangan masuk wad		
5)No of discharged 5)Bilangan discaj		
6)No of treated as out pt 6)Bilangan yang dirawat sebagai pesakit luar		
Has anyone died related to event? If yes, how many? Kematian yang melibatkan kejadian? Jika Ya, berapa?	:	Ya/ Tidak
Other information to inform Lain-lain maklumat yang anda ingin sampaikan Eg: health facility, health care worker, tourist, other agency affected etc -eg: Adakah fasiliti Kesihatan, anggota, pelancung, agensi lain terlibat	:	
Pasukan Bantuan diperlukan:	:	Ya/ Tidak Bil Pasukan
1. Pasukan Kesihatan		Ya/ Tidak
2. Pasukan Perubatan		Ya/ Tidak
3. Pasukan MHPRT ²		Ya/ Tidak
Report Prepared by: Laporan disediakan oleh: Name (Nama): Designation (Jawatan): Phone No (No Telefon): Tarikh & Masa :	:	
Ulasan Ketua Petugas CPRC Negeri Name (Nama): Designation (Jawatan): Phone No (No Telefon): Tarikh & Masa :		

Received By:

Signature:

Name:

Designation:

²MHPRT- Mental Health Psychosocial Response Team

CONTACT DETAILS OF THE STATE HEALTH DEPARTMENTS

No.	State	No.	State
1.	The State CDC Officer Perlis State Health Department Lot 217, Mukim Utan Aji Jalan Raja Syed Alwi 01000 Kangar Perlis Telephone: +604-9773 346 Fax: +604-977 3345 E-mail: cprc.pls@moh.gov.my	2.	The State CDC Officer Johor State Health Department Jalan Persiaran Permai 81200 Johor Telephone: +607-2353 306 Fax: +607-2382 291 E-mail: epidjknjhr@moh.gov.my
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: cddcpahang@moh.gov.my
5.	The State CDC Officer Pulau Pinang State Health Department Tingkat 35 & 37, KOMTAR 10590 Pulau Pinang Telephone: +604-2017 287 Fax: +604-2623 371 E-mail: epid_penang@moh.gov.my	6.	The State CDC Officer Terengganu State Health Department Tingkat 5, Wisma Persekutuan Jalan Sultan Ismail 20909 Kuala Terengganu Terengganu Telephone: +609-6222 866 / 3709 / 2749 Fax: +609-6248367 E-mail: bgerakan.trg@moh.gov.my
7.	The State Surveillance Officer Perak State Health Department Jalan Panglima Bukit Gantang Wahab 30590 Ipoh Perak Telephone: +605-2433 962 / +605-2490 200 ext. 418 / 419 Fax: +605-2552 678 E-mail: cprcprk@moh.gov.my	8.	The State Surveillance Officer Kelantan State Health Department Jalan Mahmood 15200 Kota Bharu Kelantan Telephone: +609-747 2089 Fax: +609-7480 945 E-mail: cprc_kel@moh.gov.my

No.	State	No.	State
9.	The State CDC Officer Selangor State Health Department Tingkat 9, 10, 11 & 17, Wisma Sunwayma 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
11.	The State CDC Officer Kuala Lumpur FT Health Department Jalan Cenderasari 50590 Kuala Lumpur Telephone: +603-2268 7333 Fax: +603-2268 7555 E-mail: cprckl@moh.gov.my	12.	The State CDC Officer Sabah State Health Department Tingkat 1, 3 & 6, Rumah Persekutuan Jalan Mat Salleh 88590 Kota Kinabalu Sabah Telephone: +6088-219 455 / 263 651 Fax: +6088-219 461 / 217 740 E-mail: sbhcprc@moh.gov.my
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		

SUGGESTED FORMAT FOR FINAL REPORT OF PUBLIC HEALTH EVENT

1. Title Of Report

- Informative i.e. to include what, where and when.
- Name of author(s) and department(s).

2. Synopsis – summary

- Epidemic i.e. time, place and person.
- Main findings.
- Actions taken (control measures) and recommendations.

3. Introduction

- Background of the setting in which the event occur: socio-demography, healthcare facilities, surveillance system and the usual incidence or prevalence;
- Previous case(s) / experience of similar events in the same locality or nearby areas;
- Chronology of the events: describes the circumstances leading to the initiation of the investigation i.e. to include index case(s) and significant milestones of the event.

4. Objective of the Field Investigation

5. Methodology – Materials & Methods

- Definitions and criteria used.
- Questionnaire used for epidemiological investigations.
- Study design.
- Laboratory components – type of specimen, collection and transport.
- Laboratory techniques.
- Data handling and analysis.

6. Results

- Clinical data: signs and symptoms, course of disease, complications, deaths, differential diagnosis.
- Epidemiological data: characteristics of the event, asymptomatic cases, contact, case fatality rate.
- Description of index and secondary cases.
- Epidemic curve.
- Mode of transmission: causative agent, risk factors.
- Laboratory information.

7. Discussion

- Interpretation of results: testing of hypothesis and epidemic curve (to be describes in details).

8. Remedial Actions

- A description of the actions taken or control measures.
- Evaluate effectiveness or constraints.

9. Conclusion & Recommendation

- Current status.
- Issues and challenges.

10. Lessons learnt

11. Acknowledgements

12. Annexes

- Maps, diagrams, tables etc. (if not included under the results).

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MINISTRY OF HEALTH
MALAYSIA