

YELLOW FEVER

INTRODUCTION

Yellow fever is an acute infectious disease. There are two epidemiological forms of Yellow fever i.e. urban and jungle. Urban Yellow Fever occurs in cities and is spread from mosquito to human. In the jungle form, Yellow Fever is spread from mosquitoes to monkeys and also to humans (zoonosis). Although reported cases of human disease is the principal indicator of disease risk, they may be absent (because of a high level of immunity in population) or not detected as a result of poor surveillance.

Travellers are at risk when going to endemic areas of Africa and South/Central America. The presence of the suitable vector, Aedes mosquito in Asia may contribute to its potential occurrence. Malaysia is vulnerable and receptive to Yellow Fever transmission.

Causative agent: Arbovirus of the Genus Flavivirus and family Flaviviridae.

Mode of Transmission: through the bite of infective Aedes aegypti mosquitoes.

Incubation Period: 3 - 6 days (or longer) after the bite of an infected mosquito.

COUNTRIES WITH RISK OF YELLOW FEVER TRANSMISSION

AFRICA (29 COUNTRIES)

Angola	Guinea
Benin	Guinea Bissau
Burkina Faso	Kenya
Burundi	Liberia
Cameroon	Mali
Central Africa Republic	Mauritania
Chad	Niger
Congo	Nigeria
Côte d'Ivoire	Senegal
Democratic Republic Of Congo	Sierra Leone
Equatorial Guinea	South Sudan
Ethiopia	Sudan
Gabon	Togo
Gambia	Uganda
Ghana	

SOUTH & CENTRAL AMERICA (13 COUNTRIES)

Argentina	French Guiana	Suriname
Bolivia	Guyana	Trinidad & Tobago
Brazil	Panama	Venezuela
Colombia	Paraguay	
Ecuador	Peru	

Note: The list of countries with risk of yellow fever transmission will be updated by Ministry of Health Malaysia regularly based on WHO list.

SIGN & SYMPTOMS

Some are asymptomatic but most lead to an acute illness characterized by two phases. Initially there is fever, muscular pain, headache, chills, anorexia, nausea and/or vomiting, often with bradycardia.

About 15% of patients progress to a second phase after a few days, with resurgence of fever, development of jaundice, abdominal pain, vomiting and haemorrhagic manifestations.

Death may occur 10 - 14 days after the onset of illness.

COMPLICATIONS

Haemorrhagic manifestation including epistaxis, gingival bleeding, hematemesis (coffee ground or black), melaena, and liver and renal failure. Up to 50% are fatal.

TREATMENT

Symptomatic treatment. Advise rest, drink plenty of fluids and take regular painkillers (eg. paracetamol or Ibuprofen) to relieve symptoms of fever or aching.

Specific treatment – None

PREVENTION & PRECAUTIONS

Yellow Fever Vaccination Requirement

A Yellow Fever vaccination certificate is required from all visitors or delegates (Malaysians and Foreigners) coming from or going to/through countries with risk of Yellow Fever transmission (As stated in International Health Regulations 2005 and Prevention and Control of Infectious Disease Act 1988).

Yellow fever vaccination is also required for travellers having transited more than 12 hours through the airport of a country with risk of yellow fever transmission.

Travellers or delegates without a valid Yellow Fever vaccination certificate shall be quarantined upon arrival in Malaysia for a period not exceeding 6 days.

The period of validity of an international certificate of vaccination against Yellow Fever will be lifelong*, beginning 10 days after the date of vaccination.

Note: * lifelong - In the context of international travel, the amendment to Annex 7 IHR 2005 changes the period of validity of the related international certificate of vaccination against yellow fever, and the protection provided by vaccination against yellow fever infection under the IHR (2005), from ten (10) years to the life of the person (traveller) vaccinated. This amendment enters into force on 11 July 2016.

REMINDER TO MALAYSIANS TRAVELLING TO COUNTRIES WITH RISK OF YELLOW FEVER TRANSMISSION

1. Malaysians are advised to take the vaccination at least 10 days before the date of departure to countries with risk of Yellow Fever transmission for protection against infection.
2. To carry the international certificate of vaccination during travel for health check.
3. To get the vaccination against Yellow Fever disease at the Approved Yellow Fever vaccinating Centres in Malaysia.
4. To report to Entry Point Health Office on arrival in Malaysia for health check.

YELLOW FEVER VACCINE

- Type of vaccine: Live attenuated vaccine
- Number of doses: one priming dose of 0.5ml
- Contraindications: Egg allergy, immunodeficiency from medication, disease or symptomatic HIV infection, hypersensitivity to a previous dose and pregnancy.
- Adverse reactions: Rarely encephalitis or hepatic failure.
- Recommended for: All travelers to countries with risk of Yellow Fever transmission and wherever mandatory.
- Special precautions: Not for infants under 12 months of age.

PRECAUTIONS

1. Minimize exposure to bites by modifying activities to avoid exposure to vector bites. Aedes mosquito's peak biting times are a few hours before dusk and after dawn. Avoid outdoor activity during these periods.
2. Avoid mosquito bite by applying mosquito repellent to exposed skin. When using sunscreen or lotions, apply repellents last. Reapply whenever sweat or water has removed it. Active ingredient in a repellent repels but does not kill insects. Repellent that contains DEET (N, N-diethylmetatoluamide) is most reliable and long-lasting type (35% DEET provides protection for 12 hours). DEET formulations as high as 50% are recommended for both adults (including pregnant women) and children more than two (2) months of age. It is toxic when ingested and may cause skin irritation. Permethrin is highly effective both as an insecticide and as a repellent. There is little potential for toxicity from Permethrin- treated clothing.
3. Use long sleeved clothes and long pant. Avoid wearing dark colours (attract mosquitoes).
4. Close windows or shutters at night when indoors. Use pyrethrum insecticide spray (aerosol insecticides), pyrethroid coils or insecticide impregnated tablets in evening before sleep.
5. Avoid strong perfumes, hair sprays or after-shaves (attract mosquitoes)
6. Use air-conditioning or good mosquito net especially treated with Permethrin.

REFERENCES:

1. International Health Regulations (2005), 2nd edition. Geneva: World Health Organization; 2008. <http://www.who.int/ihr/9789241596664/en/index.html> accessed 15 June 2013.
2. Vaccination requirements for international travellers by country - International Travel and Health – 2018 updates. <https://www.who.int/ith/en/> accessed 10 May 2019
3. Yellow Fever Travel Information. CDC. <https://wwwnc.cdc.gov/travel/page/yellow-fever-information> accessed 16 May 2019

**LIST OF APPROVED PRIVATE YELLOW FEVER VACCINATION CENTRES IN
MALAYSIA**

(This list will be updated by Ministry of Health Malaysia regularly)

PENANG

No.	Vaccination centre	Address	Contact no.
1.	Menara Medical Clinic	Lot LS 05, Level 1, Passenger Terminal, Building Penang Airport, 11900 Bayan Lepas, Pulau Pinang	Tel: 04-6447101
2.	Hibari Clinic Penang	No. 6, Lorong Maktab, Pulau Tikus, 10250 Georgetown, Pulau Pinang	Tel : 04 2299111 Fax : 04 2289111
3.	BP Diagnostic Centre Sdn. Bhd.	62-63 (Ground floor), Jalan Aston, 14000 Bukit Mertajam, Pulau Pinang	Tel : 04-537 5889

PERAK

No.	Vaccination centre	Address	Contact no.
1.	BP Diagnostic Centre	275, Jalan Kampar, 30250 Ipoh, Perak.	Tel: 05-2559090 Ext: 402

SELANGOR

No.	Vaccination centre	Address	Contact no.
1.	Berkat Ampang Clinic (BAC)	No. 75-4A, Jalan Mamanda 1, Ampang Point 68000 Ampang, Selangor.	Tel: 03-4266 5153/ 03-42664338 Fax : 03- 42516450
2.	KPJ Selangor Specialist Hospital	Lot 1, Jalan Singa 20/1 Section 20, 40300 Shah Alam, Selangor.	Tel: 03-5543 1111 Fax: 03-5543 1722

3.	Klinik Noridah	VG 30, Jalan Plumbum V7/V Pusat Komersial Seksyen 7, 40000 Shah Alam, Selangor	Tel: 03-5510 1009 Fax: 03-5510 1009
4.	Klinik Mediviron	No. 20 A, Jalan Jubli Perak 22/1 Seksyen 22 , 40300 Shah Alam, Selangor	Tel: 03-5567 9667 Fax: 03-5567 9667
5.	BP Specialist CentreTaman Megah Branch	No. 79, Jalan SS 23/15, Taman SEA, 47400 Petaling Jaya, Selangor	Tel: 03-7803 0992
6.	Klinik Chew	11, Jalan Rodat 1 KU/5, Bandar Bukit Raja, 41050 Klang, Selangor	Tel: +6019 959 3519 / 03-3359 7290
7.	Premier Screening & Wellness Centre Ampang Puteri Specialist Hospital	No. 1, Jalan Mamanda 9, Taman Dato' Ahmad Razali 68000 Ampang, Selangor.	Tel: 03-42895000 Fax: 03-42702443
8.	Subang Jaya Medical Centre	Jalan SS 12/1A, SS 12, 47500, Subang Jaya, Selangor.	Tel: 03-4289 5000
9.	Klinik As-Salam	No.69 & 71, Jalan 7/7C Seksyen 7, 43650, Bandar Baru Bangi, Selangor.	Tel: 03-8912 9969
10.	Sunway Medical Centre (Consultation Vaccine Unit)	No. 5, Jalan Lagoon Selatan, 47500 Bandar Sunway, Selangor.	Tel : 03-74919191

11.	Poliklinik MUC	9G, Jalan Hentian 1, Pusat Hentian Kajang 43000, Kajang, Selangor.	Tel : 03-8740 8940
12	Thomson Hospital Sdn. Bhd.	No.11, Jalan Teknologi PJU 5, Kota Damansara, Selangor	Tel: 03-6287 1111
13	Poliklinik An-Nur Desa Pinggiran Putera	No.1(Tingkat bawah), Jalan Pinggiran Putra 4A/4, Desa Pinggiran Putra, 43000 Kajang Selangor	Tel : 03-89229834 Emel : annurdpp@yahoo.com
14	Seri Kota Medical Specialist Medical Centre	Jalan Mohet, 41000 Klang, Selangor	Tel : 03 33747799 Emel : enquiry@srikotamedical.com

KUALA LUMPUR & PUTRAJAYA

No.	Vaccination centre	Address	Contact no.
1.	The KL Clinic	Mezzanine Floor, East Wing, Rohas Perkasa, No. 9, Jalan P. Ramlee 50250 Kuala Lumpur	Tel: 03-21660395 Fax: 03-21813362
2.	Twin Towers Medical Centre KLCC Sdn. Bhd.	KLCC, Lot LC 402-404, Level 4, Suria KLCC KL City Centre 50088, Kuala Lumpur.	Tel: 03-23823500 03-23823577
3.	Klinik Kita	Lot F-23, First Floor City Point Kompleks Daya Bumi, Jalan Sultan Hishamuddin, 50050, Kuala Lumpur.	Tel: 03-26989740 03-26980740

4.	Klinik Yong	Tingkat 2, Wisma Maran No. 28, Medan Pasar 50050 Kuala Lumpur.	Tel: 03-20720808 Fax: 03-20310487
5.	Drs Young Newton dan Rakan-Rakan	Level 1-01, Cape Square, Signature Office No. 11 Persiaran Cape Square Blok A, Capital Square 50100, Kuala Lumpur.	Tel: 03 - 2698 2967
6.	Prince Court Medical Centre Sdn. Bhd.	39, Jalan Kia Peng 50450, Kuala Lumpur.	Tel: 03 - 2160 0000 ext 2984/3860
7.	Klinik Integral Occupational Health Services Sdn. Bhd.	Lot 2-05, Level 2 Menara HLA No. 3 Jalan Kia Peng 50450, Kuala Lumpur.	Tel: 03 - 2171 2882 Fax: 03 - 2171 2992
8.	Gleneagles Kuala Lumpur	Blok A & Blok B, 282 & 286, Jalan Ampang, Kampung Berembang, 50450 Kuala Lumpur	Tel: 03-41413381 03-41413282
9.	Kuala Lumpur Sports Centre Sdn. Bhd.	7th Floor, Wisma Perintis Jalan Dungun, Damansara Heights 50490 Kuala Lumpur	Tel: 03 - 2096 1033 Fax: 03 - 2096 1500
10.	Pantai Medical Centre Sdn. Bhd.	No. 8, Jalan Bukit Pantai 59100 Kuala Lumpur	Tel: 03 - 2296 0888 Fax: 03 - 2282 1557
11.	Pusat Perubatan Menara Sdn. Bhd.	Level 26, Menara TM Annexe 2 No. 1, Jalan Pantai Jaya Off Jalan Pantai Baharu 59200 Kuala Lumpur	Tel: 03 - 2241 4101 Fax: 03 - 2241 4102
12.	Berkat Sentral Clinic (BSC)	G11 – G12 Ground Floor Platinum Sentral, Jalan Stesen 2, 50470 Kuala Lumpur.	Tel: 03-2718 4388 03-4266 4338 Fax: 03-2718 4381

13.	The KL Sky Clinic	B1-36-2, The SOHO Suites KLCC, Jalan Perak 50450 Kuala Lumpur	Tel: 03 - 2389 0091
14.	Hibari Clinic	17-8, 17 Floor Kompleks 1 Mont Kiara No. 1, Jalan Kiara 50480 Kuala Lumpur	Tel: 03 - 6211 5919
15	ParkCity Medical Centre	No. 2, Jalan Inti Sari Perdana Desa Park City, 52200, Kuala Lumpur	Tel: 03-5639 1212

MALACCA

No.	Vaccination centre	Address	Contact no.
1.	Pantai Hospital Ayer Keroh	No. 2418-1, KM 8, Lebuhraya Ayer Keroh 75450 Melaka	Tel: 06-2319999 Fax: 06-2318334

JOHOR

No.	Vaccination centre	Address	Contact no.
1.	Poliklinik Afiat	34G, Jalan Perjiranan 2, 81100 Bandar Dato' Onn, Johor Bahru	Tel : 07 3517470 019-7091459

PAHANG

No.	Vaccination centre	Address	Contact no.
1.	Kuantan Medical Centre (41488-H)	Jalan Tun Razak, Bandar Indera Mahkota, 25200 Kuantan, Pahang Darul Makmur	Tel : 09-5902828

2.	Klinik As-Salam Indera Mahkota	No. B42 & B44 (GF) Bandar Indera Mahkota 25200 Kuantan, Pahang	Tel : 017-4645969
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TERENGGANU

No.	Vaccination centre	Address	Contact no.
1.	Poliklinik Ibnu Sina	Lot 5832A, Bangunan MARA Jalan Kubang Kurus, 24000 Kemaman, Terengganu	Tel : 09-8584308

SARAWAK

No.	Vaccination centre	Address	Contact no.
1.	Columbia Asia Medical Centre	Lot 1035-1039 Jalan Bulan Sabit, CDT 155 98009, Miri, Sarawak.	Tel: 085-437755
2.	Klinik Cheu SB	Lot 512, Pelita Commercial Centre 98000, Miri Sarawak	Tel: 085-438068
3.	Columbia Asia 21st Century Healthcare	Lot 3582, Block 26, Jalan Sri Ikhwan Kemena Land District, Tanjung Kidurong 97000 Bintulu, Sarawak	Tel: 086-251888 Fax: 086-252888
4.	Bintulu Medical Centre	Lot 6009, Block 31, Kemena Land District 97000 Bintulu, Sarawak	Tel: 086-330333 Fax: 086-330777
5.	Normah Medical Specialist Centre	Section 30 KTL D, Jalan Tun Abdul Rahman, Petra Jaya 93050, Kuching, Sarawak	Tel: 082-440055 Fax: 082-442600

SABAH

No.	Vaccination centre	Address	Contact no.
1.	KPJ Sabah (Specialist Hospital)	Lot Off, 2, Jalan Damai, Luyang Commercial Centre 88300 Kota Kinabalu	Tel: 088-322 000 Fax: 088-272 622
2.	Klinik Tawau	No. 944, Ground Floor, Tawau Chinese Chamber of Commerce Building Jalan Habib Hussein 91000 Tawau, Sabah	Tel: 089-722 607
3.	Klinik Elopura	Lot 4, Batu 4, Jalan Utara 90000 Sandakan Sabah	Tel: 089-220 919 Fax: 089-235688

LABUAN

No.	Vaccination centre	Address	Contact no.
1.	Klinik Wilayah (L) Sdn. Bhd.	U0391, Jalan Bunga Rambai 87069 Labuan	Tel: 087-413140 Fax: 087-413146

Prepared by:

Disease Control Division

Ministry of Health

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