

**アジア諸国における新興・再興感
染症へ対応**


—安全な献血ドナーの確保と
血液製剤安全性の確保—

カンボジア

Presentation Overview


➤ **Mains Issues & current challenges**

1. Low donation rate and strategy to increase VNRBD
2. High TTIs rate and strategy to screen blood donation
3. Increasing blood components needs & strategy to response to the demand and supply
4. Limited recourses and advocacy to improve blood policy & Law





1- Low donation & strategy to VNRBD

- 31% VNRBD & 10 -15% of increasing blood demand /supply yearly :
- ✓ Create provincial steering committee for improve VNRBD
- ✓ Increasing blood donation campaigns - events in community, university , youth group
- ✓ Create blood donor club “The love Club” leading by youth organization



5 Year National Strategic Plan

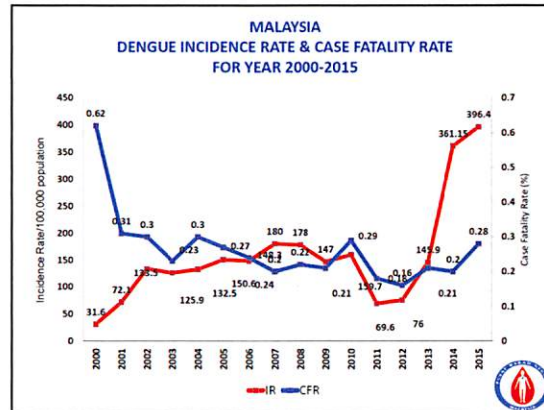
- Based upon a comprehensive blood system assessment (2011/12)
- Provides a system wide technical framework for blood program delivery
- The National Blood Program is guided by a 5 year NSP 2013-2017

マレーシア

Malaysia's Perspective

Year	Emerging and Re-emerging Infections
1997	Enterovirus Encephalitis outbreak in Sarawak (31 deaths)
1998	Hand Foot Mouth diseases (Enterovirus 71)
1999	Nipah Virus outbreak in Negeri Sembilan & Perak (265 cases , 105 death)
2003	SARS pandemic (5 cases)
2008	Chikungunya virus-associated death (10,000 affected with 51 deaths)
2009	Pandemic H1N1 (253 cases & 17 deaths) swine flu
2014	Dengue Fever (sudden surged in 2014 and increasing onward)
2015	MERS CoV (79 cases & 1 death)
2015/16	Zika Virus (1 st Oct – 7 positive cases and 163 suspected cases)



Dengue Infection

- Surveillance
- A small study with NPHL were done in 2014
 - Blood donors Klang valley
 - NS1 and Dengue IgG
 - No NS1 positive
 - 60-70% adult population positive IgG

Chikungunya

- Malaysia experienced its first CHIKV outbreak in Klang, Selangor in 1998 followed by an outbreak in the rural area of Perak in 2006 and in the urban areas of Johor in 2008.
- The first outbreak was due to an Asian genotype virus [29].
- The second outbreak was due to a Central/East African genotype virus [30].
- In 2009, CHIKV infection re-emerged in some states in Malaysia.
- A community-based case control study was carried out in the state of Kelantan.
 - Among the 129 suspected cases, 54.4% were diagnosed to have CHIKV infection [31].
- A cross sectional study of CHIKV seroprevalence was carried out in 2009 in four states (Kuala Lumpur, Selangor, Pahang and Negeri Sembilan).
 - From the 945 serum samples tested, 5.9% was positive for CHIKV IgG [32].
 - A retrospective cross-sectional study done based on the database of clusters of patients with clinical diagnosis of chikungunya (CHIK) from January 2006 to December 2009 showed that of the 13,759 identified patients, 6,314 (45.9%) were laboratory confirmed cases while 7,445 (54.1%) were considered clinical cases by epidemiological link [33].

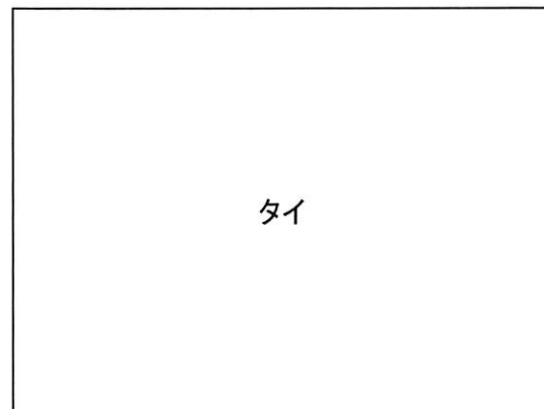
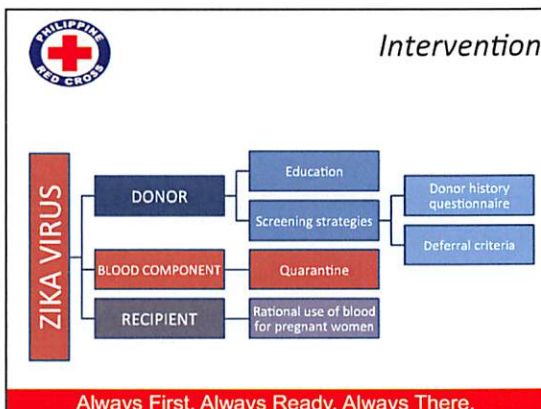
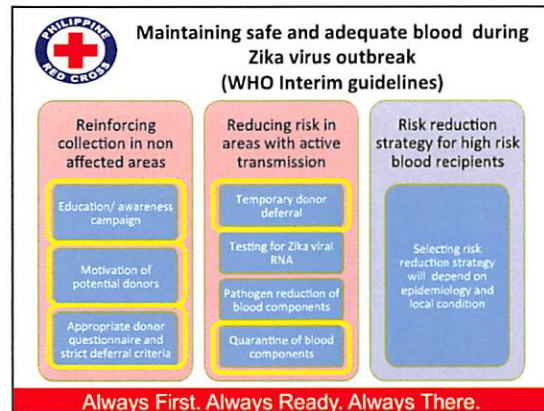
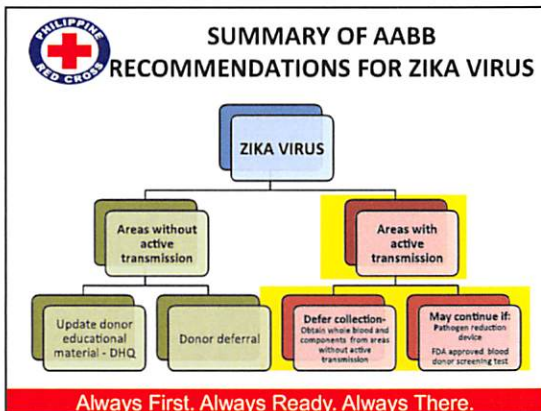
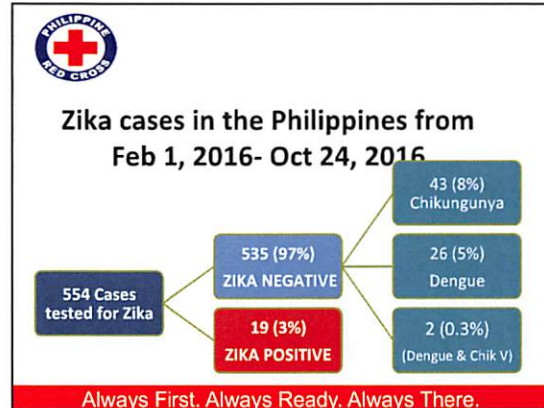
Diop D, Meseznikov G, Sanicas M (2015) Chikungunya Outbreaks from 2000 to 2015: A Review. MOJ Public Health

Zika Cases in Malaysia

- 7 reported cases
- 1st reported case is a woman from Klang who contracted the infection from her daughter working and living in Singapore
- 2nd case is 61 y.o gentleman from Likas Sabah : First case of local transmission
- 3rd case 27 y.o. pregnant lady infected from husband working in Singapore
- 7th case also from Kota Kinabalu, Sabah : local transmission

Risk reduction approach

1. Introduction to specific donor deferral criteria.
2. Implementation of sensitive screening tests
3. Limiting production of blood components or derivatives likely containing agent
4. Discontinuing collection of blood in a specific geographic region
5. Improved adherence to evidence based and conservative use of blood and blood components
6. Implementation of pathogen reduction methods



Infectious screening in donated blood in Thailand

- ❖ Health questionnaires
- ❖ Serology
 - Syphilis (Treponemal Ab)
 - Anti-HCV,
 - HBsAg,
 - HIV Ag-Ab,
- ❖ ID-NAT (in NBC & RBC) : HIV, HCV, HBV
- ❖ Pathogen reduction in some of SDP (Assessment) : up on request
- ❖ Zika virus screen is on the process of discussion

Zika virus infection in Thailand

Office of Emerging Disease, Department of Disease Control, MOPH
(<http://beid.ddc.moph.go.th> accessed 18 nov 2016)

- Thailand is in the list of countries with Zika virus infection according to WHO
- Zika surveillance was set up in Thailand since 2012
- From 1 Jan 2016 - 14 October 2016, cases report of 520 Zika infection distributed in 34 provinces in Thailand
- Mode of transmission was local and possible by vector mosquito, few were from foreigners who travelling from abroad.

Zika virus infection in Thailand (Department of Disease Control, MOPH

<http://beid.ddc.moph.go.th> accessed 18 nov 2016)

- ↳ 57 pregnant women had Zika infection and 12 women already delivered normal babies
- ↳ Report of 2 babies who were born with microcephaly and may associated with Zika infection in Samutsakorn province, Bangkok suburb
- ↳ Government policy include : eradicate mosquito, surveillance for congenital anomalies and GBS diseases, close monitoring for the prevalence of infection

WHO recommendation

1. Ensuring blood supply through reinforcing blood collection in non-affected area
2. Measures to reduce risk to blood supply in areas with active transmission
3. Selecting an appropriate risk reduction strategy
4. Aware of potential high risk blood recipient groups e.g. pregnant woman

WHO recommendation in reduce risk to blood supply in area with active transmission

1. temporary deferral
 2. Testing of blood donation ???
 3. Pathogen reduction of blood components
 4. Quarantine of blood components? : problems with
- 80% of Zika virus infection are asymptomatic, insufficient blood supply seasonally