

case  
study

# Epidemic preparedness in Indonesia

Adaptation and roll-out of IFRC's Epidemic Control for Volunteer (ECV) Toolkit and Training Manual / Palang Merah Indonesia / 2015



Credit: Palang Merah Indonesia

## Background

Indonesia is one of the world's most natural disaster-prone countries. Earthquakes, tsunamis, flooding, landslides and volcanic activity pose a constant threat to the safety and wellbeing of millions of people living across the 13,700 islands of the archipelago.

As well as vulnerability to natural disasters, Indonesia continues to face outbreaks of endemic infectious diseases such as malaria, measles, dengue fever, diarrhoea, chikungunya, rabies and leptospirosis. It also continues to report cases of the highly pathogenic avian influenza (HPAI) H5N1 in humans. While disease outbreaks can be triggered by disasters, particularly when people are displaced and have limited access to services, they can also erupt as a result of people's lack of awareness and protection; weak public health systems or the introduction of a new microorganism into the community.

To address the health impacts of disasters and emergencies the Indonesian government, through the Ministry of Health, has established the Centre for Health Crises

(Pusat Penanggulangan Krisis Kesehatan, Kementerian Kesehatan) to serve as the national centre for responding to outbreaks, epidemics and pandemics. The government has also set up preparedness and response mechanisms from district up to national level.

Yet, while the government of Indonesia and its partners have invested in integrated mechanisms, much remains to be done to ensure preparedness.

As an auxiliary to the authorities and one of the country's biggest humanitarian organisations, Palang Merah Indonesia directly supports the Ministry of Health through its Medical Action Teams and its nationwide network of community health volunteers. As well as its trained human resources, the national society has extensive experience in preparing for, and responding to, threats of outbreaks, epidemics and pandemics through its far-reaching community-based health programmes and emergency health operations.

## The Epidemic Control for Volunteers Toolkit

The Epidemic Control for Volunteers (ECV) Toolkit and training manual was developed to reinforce the IFRC Community-Based Health and First Aid (CBHFA) Toolkit, a training and resource package for volunteers in community health development and health risk reduction

programming. The toolkit ensures that volunteers have the proper training and communication tools (among other materials) before they are engaged in epidemic response in their communities.

### The ECV Toolkit consists of three major components

- **Disease tools:** A set of 17 sheets, each sheet describing a disease with outbreak or epidemic potential, such as mode of transmission, symptoms, prevention measures, people vulnerable to infection, as well as suggested questions during community assessment.
- **Action tools:** A set of 35 sheets, each describing a specific action that needs to be carried out in outbreaks and epidemics.
- **Community message tools:** A compilation of 27 sheets, each sheet containing a message which volunteers need to disseminate in communities to contain or prevent the further spread of an outbreak or epidemic.

The toolkit also comes with a training manual detailing a three-day workshop that can provide volunteers with an understanding on what constitutes an epidemic, how it spreads and the conditions that help it to spread, and what actions to take in the event of an epidemic.



Credit: Palang Merah Indonesia

## Application of the intervention

The roll-out of the toolkit in the Asia Pacific region began in late 2011, largely as part of building community preparedness to epidemics and health emergencies. Materials were produced to support National Societies, including a guidance note, training guides and a set of visual aids which societies converted into PowerPoint slides or posters.

The International Federation of Red Cross and Red Crescent Societies (IFRC) supported Palang Merah Indonesia with the roll-out of the toolkit through its epidemic preparedness project. Funded by the Hong Kong Red Cross, this project aligns with the health division's strategic plan and supports the development of its national epidemic preparedness system. The project has enhanced Palang Merah Indonesia's capacity to deliver its vital public health role in communities, by providing localised

communication materials and volunteer training, highlighting the preventive and home-care actions people may take to help control disease outbreaks and epidemics.

## Targeted areas of intervention

The project was carried out in disease outbreak/epidemic prone areas where Palang Merah Indonesia has existing community-based projects using the community-based health and first aid (CBHFA) approach.

Four provincial branches were chosen to initiate the project and field test the toolkit between November 2013 and February 2015: Banten, Daerah Khusus Ibukota (DKI) Jakarta, Jawa Barat and Papua. The branches were selected based on epidemic risks and their capacity and interest in supporting the introduction of the manual and toolkit.

## Targeted areas of intervention



### WEST JAVA

**Activities:** ECV training and simulation sessions conducted in two villages, with 20 participants each.

**Disease focus:** Measles outbreak

**Key result:** The village has drafted a set of standard operating procedures for managing a potential outbreak. The plan was drafted with involvement of community representatives, the District Health Office, the District Agency for Disaster Management and the primary health centre. It is a living document to support disease outbreak preparedness and response, and is linked to the villages disaster response plan.

### DKI JAKARTA

**Activities:** ECV training conducted with plans to further roll-out the toolkit in the future.

**Disease focus:** Dengue and diarrhoea outbreaks

**Key result:** As part of disaster risk reduction efforts, the ECV training and toolkit have contributed to enhancing Palang Merah Indonesia capacities in health risk management particularly in dengue prevention.

### BANTEN

**Activities:** ECV training and simulation sessions conducted with 40 community volunteers from two villages.

**Disease focus:** Diarrhoea outbreak

**Key result:** The development of a standard operating procedure for the management of an outbreak (epidemic contingency plan), supported by community representatives, the District Health Office, the District Agency for Disaster Management and the primary health centre.

### PAPUA

**Activities:** ECV training and toolkit roll-out conducted in Keerom district where Palang Merah Indonesia has a water and sanitation programme.

**Disease focus:** Malaria

**Key result:** Despite some implementation challenges, relating to the provinces' remoteness and cultural differences (communities in Papua have strong customs and local traditions), activities were able to begin straight away and the ECV toolkit was well accepted.

Rapid population growth, urbanization, poverty and more intense and frequent extreme weather events – driven by climate change – are exacerbating the potential for a disaster to occur in Jakarta's dense urban areas. An increase in rainfall has also resulted in floods in DKI Jakarta and poor drainage systems in slum areas have led to an increase in mosquitos breeding, heightening the risk of dengue transmission.

The designations and maps used do not imply the expression of any opinion on the part of the International Federation or National Societies concerning the legal status of a territory or of its authorities.

## ECV sensitization

Before implementation began in November 2013, Palang Merah Indonesia conducted sensitization sessions with the leadership and key staff of different headquarter divisions. The goal of these sessions was to secure support and maximise the potential for integration of the tool in community programming. Sensitization sessions were also held with key external stakeholders through external coordination meetings, including the Ministry of Health and the National Zoonotic Commission, to ensure that the toolkit's messages and materials were aligned with these organisations.

*"I am really happy to support the implementation of the ECV modules, as the community know the steps they must actively take to prevent and respond to outbreaks"*

**Mr. Rikky, Secretary of District Agency for Disaster Management in West Java**

## Adaptation of resources

The Ministry of Health committed to cooperate with Palang Merah Indonesia on the adaptation of materials and workshops for this purpose were held in May and June 2014, supported by the IFRC Indonesia delegation. The workshops were attended by departments within Palang Merah Indonesia, representatives from the four Palang Merah Indonesia provinces targeted for the project and also representatives from departments within the Ministry of Health. An external consultant was hired for the second workshop, to oversee the completion of the translation, graphic design and layout of the adapted material.

Key changes to the toolkit:

- **Translation:** A professional translator ensured the appropriate translation to the local language.
- **Disease information:** Information was adjusted to ensure it reflected the national guidelines and in particular, Ministry of Health references.
- **Actions:** The actions were adapted to ensure they aligned with the local context and with Palang Merah Indonesia's capacities.
- **Illustrations/drawings:** Images were replaced with images from Indonesia.

Perangkat 10

# 10 Pneumonia

**A Cara penularan**

- pericikan air liur/ dahak dari satu orang ke orang lain, terutama terjadi ketika batuk atau bersin
- Kontak langsung dengan benda-benda yang terkontaminasi oleh pericikan air liur/ dahak (droplet) dari orang yang sakit

**B Gejala**

- Batuk
- Demam
- Kesulitan bernapas

**C Pencegahan**

- Identifikasi penderita sebelum mereka menyebarkan penyakit
- Promosi kesehatan
- Hunian yang baik
- Menghindari keramaian ditempat umum
- Peningkatan gizi, terutama pada anak-anak
- Etika batuk
- Menghindari polusi udara dalam rumah (asap rokok, asap kayu bakar untuk memasak, dll)

**D Kelompok rentan**

- Balita
- Lansia
- Orang yang tinggal di pengungsian

**E Jika terjadi KLB**

- Mengidentifikasi orang yang sakit dengan cepat
- Rujuk orang yang sakit ke fasilitas kesehatan
- Deteksi dan rujuk kasus-kasus baru dari suspek ke fasilitas kesehatan
- Promosi kesehatan
- Pemberdayaan masyarakat

**F Aksi relawan**

Lihat perangkat aksi berikut ini untuk informasi lebih lanjut mengenai tindakan apa yang harus diambil dalam penanganan intelki pemapasan.

|    |    |    |    |    |    |   |    |
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| 31 | 29 | 32 | 28 | 30 | 33 | 4 | 27 |
|----|----|----|----|----|----|---|----|

Pengendalian KLB bagi Relawan / Palang Merah Indonesia /


Perangkat 18

# 18 Pengendalian vektor

**GAMBARAN SINGKAT**  
Banyak penyakit disebabkan oleh vektor. Termasuk Malaria, Demam berdarah (DBD), Filariasis, dan Pes

**Yang dapat Anda LAKUKAN**

- Sangat penting untuk mengingat bahwa penyemprotan kimia untuk membasmi vektor dapat berbahaya, terutama jika Anda tidak memiliki peralatan atau bahan yang tepat dan tidak tahu cara melakukannya dengan benar.
- SELALU minta para ahli untuk menyemprot vektor (bantulah hanya apabila Anda diarah/dibimbing oleh seorang ahli).
- Namun, ada banyak cara seorang relawan dapat membantu, termasuk mempromosikan metode kebersihan dan sanitasi yang tepat.
- Bicarakan dengan masyarakat Anda tentang menyimpan makanan/air dengan baik, menjaga kebersihan hunian/rumah dan masyarakat, menggunakan kelambu di malam hari, dan memakai pakaian yang melindungi (mis. lengan panjang) terhadap vektor seperti nyamuk.
- Lihatlah tabel pada sisi lain lembar ini untuk informasi lebih lanjut tentang bagaimana relawan dapat membantu.



Jaga kebersihan lingkungan masyarakat

SELALU minta para ahli untuk menyemprot anti-vektor

**Perangkat Pesan Masyarakat: 4, 12**

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Pesan 2

# 2 Penanganan Demam

**Cara menangani demam**



Turunkan suhu tubuh dengan cara :

1. Beri minum yang banyak
2. Kompres dengan air hangat di bagian dahi, lipatan ketiak dan lipatan paha.

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## Training

Palang Merah Indonesia started by conducting a three-day training (October 2014) to create a group of ‘master trainers’ of staff and volunteers in the selected provinces. This group of trainers was then equipped to lead branch and community trainings, and facilitate the toolkit roll-out in their communities. The facilitators included members of Palang Merah Indonesia headquarter’s health team, community-based health and first aid (CB-HFA) national trainers, the IFRC Indonesia Health Officer and representatives from the Ministry of Health.

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*“I did not know how to deal with outbreaks before I became involved in this training. I am very happy, I will share this knowledge with other members of my community”*

Hj. Ooh Subairah (religious leader)

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## Analysis of the intervention

While Palang Merah Indonesia, as one of the members of National Zoonotic Commission, is experienced in delivering services before, during and after outbreaks, staff and volunteers identified a number of ongoing challenges in a post-project evaluation session:

1. Staff capacity and tools for responding to outbreaks of disease – including developing a standard operating plan – require improvement;
2. There are no specific guidelines or mechanisms in place for staff and volunteer deployment during outbreaks of disease;
3. Epidemic control should be fully integrated into community-based programmes; further, the national society needs to be prepared to mobilise people, materials and other resources to support community and government responses;
4. Palang Merah Indonesia still has no standard toolkit for epidemics to support staff and volunteers during outbreaks of disease.

The introduction of the toolkit, as part of the epidemic preparedness project, was viewed, however, as an excellent way to address some of these challenges and to support communities in epidemic prevention and control. It was emphasised that the tool should be internalized and

integrated so that it becomes a standard set of tools for volunteers.

Further, that Palang Merah Indonesia could scale up their epidemic preparedness programme as a part of the national epidemic preparedness system and improve the Palang Merah Indonesia response capacity, working closely alongside the Ministry of Health.

**Q:** How can Palang Merah Indonesia improve capacities to ensure better outbreak management and programme coordination “before” an outbreak occurs?

**A:** *By utilising the ECV training modules to enhance Palang Merah Indonesia’s staff and volunteer capacities.*

**Q:** How can Palang Merah Indonesia improve capacities to ensure a better outbreak response, outbreak management and coordination mechanism in term of “when” the outbreak occurred?

**A:** *By ensuring staff and volunteers are familiar with the ECV technical briefings.*

**Q:** How can Palang Merah Indonesia integrate the ECV toolkit into community-based empowerment programmes?

**A:** *By working with communities to build knowledge and resilience in terms of understanding how to prevent and respond to outbreaks.*

These recommendations have now been included in Palang Merah Indonesia’s national long-term planning relating to health emergencies and disaster response and preparedness.



Credit: Palang Merah Indonesia

## Challenges

Although the Epidemic Control for Volunteers project improved the national society's capacities, some challenges and constraints emerged:

1. Limited staff resources.
2. Internal and external procedures, such as project agreement and financial mechanisms. For example, coordination and collaboration with the Ministry of Health and Zoonotic National Commission, while essential, took a significant amount of time.
3. Coordination and agreeing on a common timeline. This proved difficult as difficult as the project involved two sub-divisions within the health division of Palang Merah Indonesia – Emergency Health and Public Health – and each of these divisions have their own priorities.
4. Low community prioritization. Compared with natural disasters, there is often less community concern relating to public health issues and disease outbreaks. To ensure outbreak preparedness response is strong at community-level, volunteers have to do much in promoting health in emergency situations.
5. A lack of data and information related disease evidence, surveillance and health status from District Health Office (DHO) and Primary Health Care. This caused some difficulties in term of developing standard operating procedures or contingency plans.

## The way forward

Investing in communities' knowledge enhances their preparedness to deal with disaster. With this understanding, Palang Merah Indonesia have plans to roll-out the ECV toolkit into existing community-based programmes and to expand coverage areas for dissemination-related pandemic preparedness and outbreak response.

The team aim that staff in all Palang Merah Indonesia provinces (national level) receive technical training on how to use the ECV module and toolkit – and how to roll it out as a standard tool for epidemic response – and they also take part in field-testing.

A number of key lessons were learned during the ECV project in Indonesia which may be referenced by other national societies seeking to roll-out the ECV toolkit and training in their own country:

- Conduct a regular review of the standard operating procedures or outbreak contingency plans.
- Encourage ECV master training participants to share their learning by conducting the training in their own programme areas.
- Provide strong support to branches to roll-out the toolkit properly. Palang Merah Indonesia found that intensive direction was needed to facilitate the provinces and branches.
- Invest effort in coordinating between national society units, government organizations and other stakeholders, and securing their endorsement of any plans. This is critical to ensure implementation is effective and sustainable.
- When developing a contingency plan and simulation, select a disease that is a real health issue in the area. Palang Merah Indonesia found that this made implementation easier and more useful for the communities involved.
- Considering the limited resources during an outbreak of disease, conduct ECV technical briefings for volunteers as part of rapid training before deployment.



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