Avian & Pandemic Influenza Resources for Indonesia Toolkit

This eToolkit is a forum in which all stakeholders involved in Avian & Pandemic Influenza (API) in Indonesia can share key resources, best practices and lessons learned. By clicking the links on the sidebar to the right you can view the most current resources available.

History of API in Indonesia:

Infection from H5N1, the highly pathogenic avian influenza (AI) virus, has resulted in a high number of animal outbreaks and human case fatalities. Indonesia has the highest number of confirmed human cases of AI and one of the highest case fatality rates in the world, 83 percent as of 29 May 2012. While H5N1 is not readily transmitted among humans, the virus is endemic in animal populations in Indonesia, raising the possibility that H5N1 could at some point evolve into a form more easily transmissible between humans, causing a pandemic.
Most Indonesians rely on poultry for food, and many rely on poultry for their livelihood. In densely populated West Java province and Jakarta, the national capital, people’s lives are often intertwined with the poultry value chain. (Photo by CBAIC)

Chronology of Events:

2003, August. AI was first found in Indonesia in bird.

2004, February. First report of confirmed H5N1 poultry outbreaks in Indonesia. 11 provinces have infected by AI and vaccination for poultry was approved.

2005, July. The Indonesian Ministry of Health confirmed the first human case of the deadly H5N1 strain of avian influenza in the country — a poultry worker on the island of Sulawesi tested positive for the virus.

2005, December. Indonesia adopted a National Strategic Plan on AI Control.

2006, January. The International Pledging Conference on Avian and Human Pandemic Influenza convened in Beijing; 100 countries participated, including Indonesia.

2006, March. KOMNAS FBPI, a ministry level committee headed by the Coordinating Minister for Social Welfare, was created by Presidential Decree No. 7/2006 on 13 March.

2006, May. A family of eight from North Sumatra fell victim to bird flu, which raised concerns that the H5N1 virus had transmitted from person to person.
2006, September. Indonesia launched a national campaign to raise public awareness about avian influenza. The Tanggap Flu Burung! Campaign informed Indonesians about how to reduce the risk of contracting the H5N1 virus. The campaign included television and radio spots, billboard advertisements, leaflets, and other media.

2007, January. Key ministers convened to roll out a plan to curb the spread of the deadly H5N1 avian influenza virus. Regional administrations asked to increase public awareness of the dangers of bird flu and to expand surveillance for outbreaks.

2007, February. Presidential Instruction No. 1/2007 was issued regarding prevention and control of the H5N1 virus in Indonesia.

2007, March. A national meeting was held to coordinate implementation of AI prevention and control efforts in accordance with Presidential Instruction No. 1/2007.

2007, May. KOMNAS FBPI personally distributed 100,000 kits of vital AI control information to villages in West Java province.

2007, August. First pandemic workshop held in Bogor under the leadership of KOMNAS FBPI.

2007, October. A national meeting was held in Bandung to review Case Management of Avian Influenza.

2007, November. National Consultation on Avian Influenza was held in Jakarta, attended by experts from the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Children's Fund (UNICEF), major donor agencies, Bangladesh, Indonesia, Myanmar and Thailand. The objectives of the consultation were to review the AI situation, particularly in Indonesia, with respect to human risk and determinants of high mortality, to identify gaps in knowledge and strategic approaches, and to define the actions required to fill them.

2007, December. KOMNAS FBPI lead the first small-scale pandemic simulation exercise in Indonesia in Banten province just west of Jakarta, the national capital.

2007, December. KOMNAS FBPI participated in the International Ministerial Conference on Avian and Pandemic Influenza held in India. Resulting conference recommendations included strengthening national capacity to diagnose influenza in humans, expediting the development of national pandemic planning and response guidelines, and developing and implementing national pandemic preparedness plans.


2008, April. First full-scale pandemic epicenter response simulation conducted in Jembrana, Bali.

2008, May. Indonesia participated in an Asia-Pacific Economic Cooperation meeting to coordinate implementation of pandemic influenza preparedness efforts with representatives of
the private sector.

2008, July. Indonesia participated in a meeting of the Association of Southeast Asian Nations (ASEAN) on regional pandemic preparedness and response planning. Indonesia was appointed head of the ASEAN technical working group for influenza pandemic preparedness and response.

2008, October. KOMNAS FBPI participated in the 6th International Ministerial Conference on Avian and Pandemic Influenza held in Egypt.

2008, August ? November. KOMNAS FBPI conducted six non-pharmaceutical pandemic outbreak response desktop exercises and field simulations.

2009, June. World Health Organization raised the global pandemic alert to phase six, formally marking start of 2009 H1N1 influenza pandemic. KOMNAS FBPI worked closely with experts to build nation's capacity to prevent emerging infectious diseases following One World One Health principles.


2009, June. Indonesia participated in the Global Pandemic Response: Improving International Coordination Conference held in the UK. It emphasized the importance of increasing the international response to protect essential non-health services sectors from the effects of pandemic.

2009, July. KOMNAS FBPI produced and distributed H1N1 information, education and communication material to the public describing flu prevention measures.

2009, September. A public health information campaign was launched for the prevention and control of influenza H1N1/2009 during the Lebaran holiday, which marks the end of the fasting month of Ramadan, when many Indonesians return to their hometowns. Campaign information was distributed via trains, buses, ships, and planes.

March, 2010. End of KOMNAS FBPI mandate, with a new government agency likely to take over the task of coordination in the future

May, 2011. National Commission (KOMNAS) Zoonotic was formed through Presidential Decree No. 30/2011. It took over the mandate of KOMNAS FBPI and expanded the scope of works to include other zoonosis diseases.

December, 2012. A new type of bird flu virus was found in Indonesia. It killed thousands of ducks in Central Java, East Java, and Yogyakarta.
Avian and Pandemic Influenza Resources for Indonesia toolkit was developed in 2012 under SAFE (Strategies Against Flu Emergency)-USAID program as a tool to facilitate coordination among partners by sharing information, knowledge and communicating experiences for AI and Pandemic Influenza Programs in Indonesia.

In its process, SAFE did not wish to create a new tool, rather it wishes to optimize the already existing online platform namely K4Health (Knowledge for Health).

In this endeavor, Indonesia is the pioneer in which documents on Avian Influenza and Pandemic Influenza is carefully selected, stored, and shared among users. It is a collaborating effort in which several organisations are involved and in-charge. Currently the structure for the site has been finalized. No less than 160 documents have populated the sites from different organization.

On 2 April 2013, a training was conducted inviting participants from line technical agencies in Indonesia, such as Ministry of Agriculture, Ministry of Health, Komnas (?National Commission?) Zoonosis, FAO, WHO, and USAID. Representative of these institutions were granted special access to upload their own resources as they become available, so that the toolkit remains a living and dynamic platform through which all stakeholders can share the latest and most important information.

**Government of Indonesia**

The Government of Indonesia has implemented national plans for the control of API under the leadership of the MOA, MOH and coordinating bodies. Interventions reach to the district and sub-district levels and involve local government, the private sector and community and consumer organizations. Considerable work has been accomplished in the areas of research, advocacy, policy, capacity building, and behavior-change communication.
Former Health Minister of Indonesia addressing participants of Public-Private Partnership Workshop on revitalising traditional poultry market in Indonesia for AI control and prevention. Photo by WHO Indonesia.

Strategy

2006-2008 Country Strategy for API in Indonesia:

In December 2005, Indonesia adopted a National Strategic Plan for Avian Influenza and Pandemic Preparedness. The National Strategic Plan covered the aspect of animal healthcare as well as human healthcare. It was intended as a national guide for all stakeholders for handling avian influenza in Indonesia. Furthermore, on a regional and global level, the strategic plan was also part of the regional and global strategy.
Formulation of the National Strategic Plan was done in three stages. The first stage was joint formulation by the Department of Health, the Department of Agriculture and coordinated by the State Ministry for National Development Planning/Bappenas. The second stage was perfecting the plan by involving related authorities, associations, professional bodies and the private sector as well as verification to fulfill international standards from international bodies competent in the field of animal and human health. In the third stage, all related authorities formulated more concrete operational plans complete with technical guidelines which refer to this National Strategic Plan.

National Strategic Plan for Avian Influenza and Pandemic Preparedness 2006-2008

Resources:

- Strategi dan Rencana Aksi Nasional Penanganan Flu Burung pada Burung Liar di Indonesia (Strategy and National Action for AI Management in Wild Birds)

This publication provides a strategy and action plan for AI management in wild birds in Indonesia.

Regulations

In early 2004, the government officially confirmed that cases of avian influenza has been detected. The infected poultry was identified in Pekalongan in the heart of Central Java. The Health Ministry designated hospitals in high risk areas to deal with any suspected human cases. In July 2005, a 38-year-old father from a Jakarta suburb became the first laboratory confirmed
His two daughters also died, but H5N1 could not be confirmed. An investigation could not determine where or how the victim contracted the virus. Cases quickly began to mount. Hundreds of thousands of poultry had died of the virus. Indonesia was fast becoming the center of the storm.

Several regulations by different ministries and institutions were immediately issued to tackle the problems. Among these ministries and institutions, Ministry of Health, Ministry of Agriculture, and Komnas FBPI were the leading sectors. This page contains regulations issued by these government bodies related with AI prevention and control.

Resources:

- **Kumpulan Peraturan Perundangan Pengendalian Avian Influenza (Compilation of Regulation concerning AI)**
  
  Compilation of the regulations on AI under the Ministry of Agriculture of Indonesia.

- **Keputusan Direktur Jenderal Bina Produksi Peternakan Tentang Pedoman Pencegahan, Pengendalian, dan Pemberantasan Penyakit Hewan Menular Influenza Pada Unggas (AI)**
  
  This decree was issued by Director-General Livestock Production Assistance of Ministry of Agriculture. The decree has two attachments namely Guideline for the Prevention, Control, and Eradication of Animal Infectious Diseases Influenza in Poultry and Guidelines for Providing Compensation Due To AI Outbreak.

- **Keputusan Direktur Jenderal Bina Produksi Peternakan Tentang Perubahan Lampiran II**
  
  The decree was issued to revise the previous enacted guideline on provision of compensation. The revision was on the timeline. The earlier version stated that compensation will be given to poultry farmer whose flock were infected in the period of 29 January 2004 until 29 July 2004. The revised version was 29 January 2004 until 30 November 2004.
The decree was issued to revise the previous enacted guideline on provision of compensation. The revision was on the compensation amount. The earlier version stated that compensation at the amount of IDR 5,000 would be given to per layer that was being culled, IDR 4,000 to broiler, and IDR 5,000 to duck. The revised amount were IDR 2,000 to be given to layer, broiler, and duck.

The regulation was issued by Director-General of Livestock to revise the previous enacted guideline on Prevention, Control, and Eradication of AI in Poultry. The revisions included subjects of vaccination, poultry trafficking, and surveillance.

Poultry is an everyday fact of life in Indonesia. Millions of backyard farmers live here. Many families are economically dependent on the commercial poultry industry which is valued in excess of US$ 6 billion a year; employs some 10 million people; and for many more domestic poultry owners, especially in rural areas, is a key source of food and income. But raising poultry is only a part of the problem. The powerful H5N1 virus can spread during transportation, while it's being sold at the market or during the slaughtering and cooking process. Other related industries also pose the same threats. Feathers used for making shuttlecocks and the processing of chicken manure for fertilizers also exposed the virus to workers and there few controls over these informal industries. (Source: Komnas FBPI).

Realising this, the Government of Indonesia issued several guidelines that demonstrate proper behaviors for handling poultry and for responding to diseases cause by it. These guidelines provide reference for common citizen to live healthily and safely with poultry. Among these guidelines were also guidelines from the Ministry of Health on how to respond to AI when AI is transmitted to human, both for household reference and for health personnels.

This page contains various guidelines issued by relevant government institutions in Indonesia as reference for AI prevention and control measures.

Resources:
Pedoman Tata Laksana Klinis Flu Burung (H5N1) di Rumah Sakit (AI Clinical Case Management Guideline for Hospital)

This Guideline serves as the primary source of reference for health workers on how to handle AI cases in hospital. It has been revised two times before and this is the latest revision following some changes on MOH and WHO rules and regulation on AI cases.

Pedoman Produksi Dan Penanganan Daging Ayam Yang Higienis

This document provides guidelines for slaughtering houses on how to perform a halal and hygienic slaughtering of chicken, as well as how to distribute the product after slaughter.

Penanganan Daging Unggas yang Higienis

This booklet was produced by MOA as part of their Information and Education Communication materials with the purpose of increasing awareness on how to handle poultry carcasses in a hygienic way.

Pandemi Influenza Panduan Praktis Bagi Masyarakat

This publication provides practical guidelines for individuals and communities to protect themselves and their families against pandemic influenza.

Prosedur Operasional Standar Pengendalian Penyakit Avian Influenza

This publication serves as the Standard Operating Procedure (SOP) of the MOA for control of AI. It contains practical guidelines for AI control that are easy to be implemented by field officers and the community.
Pedoman Intervensi Non Farmasi Menghadapi Pandemi Influenza (Guideline for Intervention by Non-Medical/Non-Pharmacy Institutions in Facing Pandemic Influenza)

This publication is intended as a guideline for pandemic preparedness for the non-pharmacy and non-medical sector. There are five such sectors that are highlighted in this publication: government officials, non structured institutions, state owned enterprises, private sectors, and NGOs.

• Pedoman Umum Pengendalian Avian Influenza (Flu Burung) dan Program Penanganannya (General Guidelines for AI Management)

This book was published by Komnas FBPI (National Committee for Avian Influenza Control and Pandemic Influenza Preparedness). It contains a general guidelines for AI management in animals and humans as well as preparations for a pandemic.

• Pedoman Manajerial Pencegahan dan Pengendalian Infeksi di Rumah Sakit dan Fasilitas Pelayanan Kesehatan Lainnya

Pedoman Manajerial Pencegahan dan Pengendalian Infeksi di Rumah Sakit dan Fasilitas Pelayanan Kesehatan Lainnya

These guidelines are intended for hospital management staff, and contains managerial procedures for infection prevention and control.
These guidelines are intended for hospitals and other health facilities and contain standard operating practice (SOP) for infection prevention and control.

- **Pedoman Pasar Unggas dan Daging Unggas yang Bersih dan Sehat (Guidelines for Clean and Healthy LBM and Poultry Products)**

  This publication provides guidelines for healthy and clean poultry handling from the collecting point to the slaughtering house, market, and finally, to the consumer.

- **Upaya Pencegahan Penularan Flu Burung**

  This booklet explains how to prevent AI transmission in the poultry slaughtering house.

- **Pedoman Pelaksanaan Pemberian Kompensasi Akibat Wabah Avian Influenza**

  The Government of Indonesia provides financial compensation for poultry farmers that are affected by depopulation due to AI outbreak in the period of 29 January until 29 July 2004. This document provides guidelines for providing such compensation.

- **Pedoman Pencegahan, Pengendalian, dan Pemberantasan Penyakit Hewan Menular Influenza Pada Unggas**
This guidelines was developed with two primary objectives: to maintain areas free of Avian Influenza and to implement control of Avian Influenza in the infected areas. The guidelines was issued in 2005 and provided reference for relevant authories and local government to prevent, control, and eradicate AI in poultry.

Institutions

It quickly became clear that AI was not only a health issue but involved working closely with the agriculture ministry’s as well as others, such as trade, transportation, education. In Indonesia, roles of coordination for these ministries was played by Komnas FBPI. Komnas FBPI was dissolved in 2010 and now the function is replaced by Komnas Zoonosis.

These are the institutions that involved in AI control and respond in Indonesia:

Ministry of Agriculture

Strategy

Minister of Agriculture Decree No. 96/Kpts/PD.620/2/2004 was issued on 3 February 2004. This was an official statement on contagious animal disease outbreaks of influenza in poultry. At the time, AI had spread to 16 provinces and 101 districts. With total deaths amounted to 8,888,790 poultry. Comprehensive actions were taken that include: biosecurity improvement, vaccination,
depopulation, poultry traffic control, surveillance, public awareness, restocking, stamping out in new infected area, and monitoring, reporting, and evaluation.

Soon after that, Minister of Agriculture issued a formal announcement to all Governors and Mayors/Regents detailing what actions need to be taken at the regional level to response to AI. The announcement was made in a format of an official letter containing strategy of AI response (Surat Edaran Menteri Pertanian Kepada Gubernur dan Bupati serta Walikota Mengenai Peningkatan Pengendalian AI, 2005).

In 2012, another official announcement was made. This time was from DG of Livestock and Animal Health about the death of ducks in Central Java, Yogyakarta, and East Java due to AI (Surat Edaran dari Dirjen Peternakan dan Kesehatan Hewan Mengenai Pengendalian Penyakit AI Pada Itik).

Declaration, Framework, Action Plan

In 2004, the Ministry of Agriculture issued a Blitar Declaration to free Indonesia from AI by 2007.

During the 27th Meeting of the ASEAN Ministers on Agriculture and Forestry, the Regional Framework for Control and Eradication of HPAI was approved. The framework covered 3 years plan for 8 strategic actions.

AI-related Meetings

Coordination Meeting and National Evaluation on AI Eradication was held on 11-13 October 2004 in Blitar. The meeting was attended by representatives of 33 agriculture office from animal health at the provincial level, poultry association, as well as WHO.

Coordination Meeting and National Evaluation on AI Eradication was held on 28-29 September 2005 in Bogor.

Coordination Meeting and National Evaluation on AI Eradication was again held on 15-16 December 2004 in Bogor to refresh and evaluate progress on AI control.

OIE/WHO/FAO International Conference: Strategy to fight AI, 4-6 July 2005, Kuala Lumpur,

2nd Meeting of the ASEAN+3 HPAI Task Force Meeting, 6-8 September 2005, Kuala Lumpur

27th Meeting of the ASEAN Ministers on Agriculture and Forestry (AMAF), 29 September 2005, Tagaytay City, Phillippines.

All Governors Forum on 15 November 2005 in Presidential Palace to stress head of provincial roles in eradicating AI.

The APEC Meeting on Avian and Pandemic Influenza Preparedness and Response, 31 October ? 1 November 2005, Brisbane.
Global Meeting on AI and Human Pandemic Influenza, 7-9 November 2012, in Geneve. Participated by MOA, together with National Development Planning Agency and MOH.

International Meeting of Health Ministers: Global Pandemic Influenza, 2005, Ottawa


National Coordination Meeting on AI Control, 2006, Denpasar.

The First MAFF-Japan/OIE/FAO Joint Conference on Special Trust Fund Programme for HPAI Control at Source in South East Asia, 25-27 April 2006, Tokyo.

4th ASEAN HPAI Task Force, 3-4 April 2006, Viet Nam.

The Joint FAO/USDA Regional Meeting on Molecular Epidemiology of Origin and Evolution of H5N1 HPAI Virus in Asia, 9-10 September 2009.

National Coordination Meeting on AI Control, 8-10 October 2010, Semarang.

Campaign

Based on the above findings, MOA announced National Movement TUMPAS AI (*Eradicate AI*) on 29 September 2005 in Pandaan, East Java. TUMPAS AI is an abbreviation from:

T- Tak Perlu Panik (*No need to panic*) because the virus is actually among weak virus that can be killed with heat, sun, and desinfectant.

U- Usahakan kebersihan kandang unggas (*Make an effort to keep poultry cages clean*) use desinfectant.

M- Mencuci tangan (*wash hand*) with soap and water especially after make contact with poultry and its products.

P- Proteksi (*Protect*) children and elderly from direct contact with poultry especially sick poultry.

A- Aman (*Ensure the safety*) of your food by well cooked poultry meat and poultry products.

S- Segera lapor (*Immediately report*) to the officers when there is sick poultry or sudden deaths of poultry.

TUMPAS AI campaign was conducted on media and off air events.

International Partnership
In 2005 forged partnership with South Korea, Japan, Australia, US, China, and ASEAN countries. Partnership was also forged with WHO, FAO, OIE, and GTZ.

In 2005, South Korea donated 15,000 rapid test kit.

Al Crisis Center

Established Al Crisis Center 021-78830617 or email to kewan@deptan.go.id.

Resources:

- surat edaran pengendalian kasus Avian Influenza pada itik
  Surat Edaran nomor 09018/Pd.650/F5/11/2012 tentang Pengendalian Penyakit AI pada itik

Report

Surat Edaran

Resources:

- surat edaran pengendalian kasus Avian Influenza pada itik
  Surat Edaran nomor 09018/Pd.650/F5/11/2012 tentang Pengendalian Penyakit AI pada itik

Ministry of Health

Resources:
Petunjuk Praktis Surveilans Infeksi Rumah Sakit
(Practical Guideline for Infection Surveillance in Hospital)

This book is published by Ministry of Health of Indonesia to provide guidelines for hospital workers in improving quality of infection control in hospital.

Pedoman Manajerial Pencegahan dan Pengendalian Infeksi di Rumah Sakit dan Fasilitas Pelayanan Kesehatan Lainnya

Pedoman Manajerial Pencegahan dan Pengendalian Infeksi di Rumah Sakit dan Fasilitas Pelayanan Kesehatan Lainnya

Referensi: Sosialisasi Flu Burung Bagi Petugas Pelayanan Kesehatan Dasar (Reference Document on AI Socialisation for Basic Primary Health Care Workers)

This book contains basic information about definition of AI, how to handle AI cases, how to refer AI patients to referral hospitals, and how to conduct epidemiology investigation in the field. It is intended for primary health care workers who normally are the first point of contact when community encounter outbreak and cases from the field.

KOMNAS FBPI (National Committee for AI Control and Pandemic Influenza Preparedness)

On 13 March 2006, President Susilo Bambang Yudhoyono issued a decree that formally launched Komnas FBPI, a ministerial-level committee, headed by the Coordinating Minister for People’s Welfare Aburizal Bakrie. The committee consists of 14 members, including all Ministers directly involved in combating the H5N1 virus, the Chief Commander of the Indonesian National Army, the Head of the Indonesian Police, and the Chairman of the Indonesian Red Cross. Bayu Krisnamurthi was to serve as Secretary and Chief Executive of Komnas FBPI and tasked to
manage its day-to-day operations, while Dr. Emil Augustiono and Tri Satya Putri Naipopos, a senior veterinarian, would serve as deputies. Komnas FBPI was to be advised by a panel of experts and also consult with the key animal and human health professional associations in Indonesia. The committee’s day-to-day works would be undertaken by a secretariat established near the Coordinating Minister for People’s Welfare's office. More than a dozen full time staff, including some senior retired officials who still maintain strong ties in their respective ministries, backed the secretariat. One of the main functions of the secretariat is to facilitate the flow of information between government agencies and to distribute the latest information and data to the public and news outlets through its media and information center.

From the left, Bayu Krisnamurthi, Chief Executive of Komnas FBPI walking with Aburizal Bakrie, Coordinating Minister for People’s Welfare.

(Source: Komnas FBPI "Building a Plane while Flying It")

Resources:

- Building a Plane while Flying It (Perjalanan KOMNAS FBPI 2006-2010)

This publication provides a description on AI in Indonesia and Komnas FBPI journey from
Uji Coba Pasar Unggas Bersih dan Sehat: Contoh dan Stimulans Bagi Kab/Kota Menuju Pasar Sehat (Lessons learned from Healthy LBM Initiative)

This publication describes the lessons learned during process of implementing the Healthy Live Bird Market (LBM) initiative in Indonesia.

International & USAID Partners

Each section below will be updated by representatives of each of international entities involved in AI and PI programmes in Indonesia.

FAO

Resources:

- Commercial Poultry Veterinary Programme (PVUK) Success Story

Since 2010, the government of Indonesia worked through the Commercial Poultry Veterinary Program (Program Veteriner Unggas Komersial), or PVUK by its Bahasa acronym, to develop a strategy for the control and eradication of Highly Pathogenic Avian Influenza (HPAI) within commercial poultry farms (Sector 3 Farms). PVUK is an answer from the government to address the needs of commercial poultry farmers concerning disease control and poultry management. This document briefly describes the story of PVUK’s accomplishments and shares lessons learned from the implementation experience with the private sector.

Success Story of the Sustainable Implementation of the
**DKI Jakarta Markets Restructuring Programme**

Human infection with the H5N1 avian influenza virus has occurred more frequently in the greater Jakarta area than any other urban area in the world. The FAO started providing technical assistance to the DKI Jakarta government in 2009 by assisting the local government in restructuring the poultry market system and enforcing new regulations. Measures taken included adding more poultry relocation centres, collaborating more closely with private operators and being more consistent in providing technical support, such as with infrastructure development and cold chain implementation. In addition, the FAO has analyzed and formulated the necessary criteria for setting up these additional relocation centres in collaboration with the DKI Jakarta administration. This document briefly describes the lessons learned in implementing the project in the Jakarta area.

- **Participatory Disease Surveillance and Response (PDSR) Success Story**

  In early 2006, the Government of Indonesia, with the assistance of FAO, began working with the Ministry of Agriculture and local governments to train government staff in the Participatory Disease Surveillance and Response (PDSR) system. The rationale was that participatory tools and processes could serve as a platform for the rapid mobilization and coordination of animal health services in a community-based programme to prevent and control Highly Pathogenic Avian Influenza (HPAI) outbreaks in village poultry. The pilot HPAI prevention and control programme was coordinated nationally via provincial-level local disease control centres (LDCCs), which were formed and funded for this task in Bandung, Bogor, Yogyakarta, and Malang using PDSR project funds. This brief document shares the best practices gleaned from implementing the project.

- **One World, One Health: A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human-Ecosystem Interface**

  This document presents a strategic framework for applying the ?One World, One Health? concept, which establishes an interdisciplinary and cross-sectoral approach, to preventing epidemic or epizootic disease and for maintaining ecosystem integrity. Chapters 1 and 2 discuss the global experience with highly pathogenic avian influenza (HPAI) and lessons learned from this experience.
Wild Birds and Avian Influenza: An introduction to applied field research and disease sampling techniques

This publication is intended as an introductory manual to support field efforts with regard to the study of bird populations and ecological aspects of avian influenza viruses. The topics covered in this manual address monitoring technologies and sampling techniques, wild bird surveillance, some features of habitat use and migration ecology.

A Bahasa Indonesia version of this document, entitled "Burung Liar dan Flu Burung: Pengantar Riset Lapangan Terapan dan Teknik Pengambilan Sampel Penyakit" is also available here.

WHO

WHO Projects in the area of zoonosis include:

1. Strengthening the health system for acute respiratory infections. A USAID funding, focus on zoonotic influenza, primarily H5N1.
2. Strengthening the Human Health Surveillance System for Emerging Infectious Diseases Detection and Response. AusAID funding, focus on EIDs Response including zoonoses.
3. Implementing the National Strategic Plan for Avian Influenza. An EU funding, activities closed in December 2011.
4. IDENTIFY. A USAID funding via SEARO.
5. HPED. An EU funding via SEARO.

In addition to the above, there is also a WHO Collaboration Centre on Influenza at the human-animal interface in Indonesia. By definition, WHO collaborating centres is "an institution designated by the Director-General to form part of an international collaborative network carrying out activities in support of the Organization's programme at all levels."

The WHO Collaboration Center focuses on 5 topics:

1. Integrated risk assessment for influenza at the human animal interface
2. Avian influenza dynamics at the human-animal interface
3. Virology of A(H5N1) viruses isolated from human and animal populations
4. Risks associated with environmental contamination by avian influenza viruses, including risks from Live Animal Markets.
5. Clinical management of human cases of avian influenza virus H5N1 infection

WHO Indonesia Country Page: www.who.int/countries/idn/en/

Resources:
• **WHO Indonesia Collaboration with Animal Health**

This is a presentation given at Technical Briefing Meeting on Donor Coordination, 3 May 2012. The presentation gave introduction on the scope of WHO Program for Collaboration with Animal Health.

• **Final Report of Implementing the National Strategic Plan for Avian Influenza (INSPAI)**

Final Report of Implementing the National Strategic Plan for Avian Influenza (INSPAI) funded by European Union. The project focused on case management, surveillance, healthy food market, risk communication and research.

• **Asia Pacific Strategy for Emerging Diseases**

This document outlines a common strategic framework for countries and areas of the South East Asia and Western Pacific Region region to strengthen their capacity to manage and respond to emerging disease threats, including influenza pandemics. This was first launched in 2005. Over the past five years it has been updated to include 8 focus priority areas: 1) Surveillance, Risk assessment, and Response; 2) Laboratories; 3) Zoonoses; 4) Infection Prevention and Control; 5) Risk Communication; 6) Public Health Emergency Preparedness; 7) Regional Preparedness, Alert, and Response; and 8) Monitoring and Evaluation.

• **Strengthening Indonesia’s Field Epidemiology Training Programme to address International Health Regulations requirements**

This article appears in WHO Bulletin in 2010. According to the International Health Regulations (IHR), countries need to strengthen core capacity for disease surveillance and response systems. Many countries are establishing or enhancing their field epidemiology training programmes (FETPs) to meet human resource needs but face challenges in sustainability and training quality. Indonesia is facing these challenges, which include limited resources for field training and limited coordination in a newly decentralized health system. The main lesson learnt is that linkages with universities, ministries and international agencies such as the World Health Organization are critical for building a sustainable high-quality
programme. The most critical factors were development of trusting relationships and clear definitions of the responsibilities of each stakeholder.

- **Referensi : Sosialisasi Flu Burung Bagi Petugas Pelayanan Kesehatan Dasar**

  Avian Influenza Reference for Primary Healthcare Worker for Early Detection and Treatment

- **One World, One Health: A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human-Ecosystem Interface**

  This document presents a strategic framework for applying the "One World, One Health" concept, which establishes an interdisciplinary and cross-sectoral approach, to preventing epidemic or epizootic disease and for maintaining ecosystem integrity. Chapters 1 and 2 discuss the global experience with highly pathogenic avian influenza (HPAI) and lessons learned from this experience.

- **Pedoman Manajerial Pencegahan dan Pengendalian Infeksi di Rumah Sakit dan Fasilitas Pelayanan Kesehatan Lainnya**

  Pedoman Manajerial Pencegahan dan Pengendalian Infeksi di Rumah Sakit dan Fasilitas Pelayanan Kesehatan Lainnya

**OVERVIEW**

The U.S. Government is the largest donor supporting Indonesia’s efforts to control H5N1 avian
influenza (AI) and USAID plays a key role. USAID provides support aimed to reduce impact of H5N1 in Indonesia on animals and humans and limit the emergence of a pandemic influenza. Since 2005, USAID has provided more than $110 million to support API control and prevention in Indonesia.

Indonesia is uniquely vulnerable to HPAI and the emergence of new influenzas, due to its large population, high poultry density, and the close interaction of poultry with humans. Even though AI cases in animal and human were decreased, AI is endemic throughout the poultry sector in Java, Sumatra, Sulawesi, and Kalimantan, and sporadic outbreaks continue resulting in human fatalities. USAID activities strengthen pandemic preparedness, surveillance and response, laboratories strengthen, targeted communication campaign, and cleaning & disinfection in markets and along the poultry value chain, and training and educational opportunities in animal and human health fields. USAID, and partners support, a range of efforts aimed to improve animal and public health to prevention and control avian Influenza and opportunities for pandemics in partnership with GOI and other stakeholders, including the private sector.

PROGRAMS

Strengthening Role of GOI in Animal Surveillance and Response

USAID has made a major investment with the Ministry of Agriculture (MOA) and local government livestock services to implement a village poultry surveillance, outbreak control and prevention system in partnership with the UN Food and Agriculture Organization (FAO). The Participatory Disease Surveillance and Response (PDSR) system provides district level veterinarians with the tool for rapid AI detection and response to contain the spread of disease within villages, and the approach is being adopted by GOI into the National Veterinary Service. In partnership with John Snow International (JSI), USAID has established a cold chain system for the poultry AI vaccination program in 16 districts in three provinces as a possible national model. Capacity building in cold chain management is also being done to support the model. USAID, in addition to short term training programs, is providing long term training to animal health officers to earn a Master’s degree in Field Epidemiology Training Program (FETP) and Veterinary Epidemiology which will help to sustain animal and public health surveillance activities. USAID together with other donors and international agencies will assist the GOI to coordinate, synergize, review and evaluate all programs on API prevention and control to ensure the program will have significant impacts.

Human Influenza Health Surveillance

USAID is building capacity with the Ministry of Health (MOH) to integrate human and animal surveillance and response through a program channeled and assisted by the World Health Organization (WHO). This program works to reduce human infections and also to improve survival outcomes by increasing suspect case detection to within 24 hours of an animal outbreak notification. Key activities are aimed to improve care seeking behavior and improve case management to reduce human fatalities. Health system strengthening efforts will ensure that hospitals are appropriately equipped and can provide adequate standards of care for severe respiratory infections. USAID is continuing to work with the MOH’s on establishing a program
called *Desa Siaga* or Alert Village to prevent disease by reducing risky behaviors and supporting local care seeking behavior.

**Poultry Chain Intervention**

USAID is continuing work with FAO to build cleaning and disinfection capacity in urban markets to reduce AI spread, which is a priority for GOI and support their Healthy Market Program. Through support from USAID, FAO also provides technical assistance to high-risk layer farms to improve biosecurity and health, and is working to unite commercial poultry producers to support this goal. An effort is underway in Indonesia to restructure the poultry market chain to enhance public health in Jakarta FAO is a critical partner to the Ministry of Agriculture on this issue. USAID and FAO continue efforts initiated by Community Based AI Control (CBAIC) program and Strategies Against Flu Emergence (SAFE) to assist commercial poultry companies to improve their biosecurity practices and good farm management practices to prevent the spread of AI and other diseases. Additionally, efforts will continue to change risky behaviors within the poultry value chain, including farms, transport vehicles, live bird markets, collector yards, slaughterhouses, and communities at high-risk.

**Behavior Change Communications**

A core part of the USAID AI program includes community outreach and raising awareness, USAID continues to work closely with GOI to create a community based network which can integrate activities to prevent and respond to disease outbreaks. Working with FAO, USAID provides strategic efforts to the MOA in technical assistance and strengthen in-country HPAI communication capacities, competencies and leadership. A new program will be launched aimed to disseminate valuable health care information regarding influenza prevention and treatment and will seek to improve care seeking behaviors.

**Research**

In collaboration with GOI, USAID supports the World Organization for Animal Health (OIE)/FAO Networks of Expertise on Animal Influenza?s OFFLU project to characterize AI viruses in order to identify new strains and develop improved poultry vaccines. USAID supports CDC in collaboration with MOH in conducting research program on strengthen AI surveillance in certain high risk areas in Jakarta. USAID also will engage related partners for social and economic analysis on impacts of adoption and improvement of biosecurity in poultry commercial farms.

*Source: USAID*

**Resources:**

- USAID?s Programs for Avian Influenza and Other Emerging Pandemic Threats
EMERGING PANDEMIC THREATS (EPT) PROGRAM

The EPT Program launched in Indonesia in July 2011 and is part of a commitment by the U.S. Agency for International Development (USAID) to preempt or combat newly emerging diseases that could spark future pandemics.

EU

USDA-APHIS

National Non Governmental Partners

This section is dedicated for Non Governmental Partners and contains documents developed by these partners for the purpose of API control and management.
PMI

Resources:

- Rencana Kontijensi Palang Merah Indonesia (PMI) Menghadapi Pandemi Influenza

This document is a Contingency Plan of Indonesian Red Cross in the face of AI and Pandemic Influenza. The development of this document was part of a program activity of Humanitarian Pandemic Preparedness, a program funded by USAID through IFRC. The purpose of this document is to prepare Indonesian Red Cross in preparing, responding, and implementing humanitarian activities in the event of pandemic influenza.

- Rencana Keberlangsungan Kegiatan Palang Merah Indonesia Dalam Kondisi Pandemi Influenza

This document is a Sustainability Plan for Indonesian Red Cross program in the face of Pandemic Influenza. The development of this document was part of a program activity of Humanitarian Pandemic Preparedness, a program funded by USAID through IFRC. The purpose of this document is to ensure the implementation of Indonesian Red Cross field activities in the event of pandemic influenza.

API Projects in Indonesia

This section lists AI projects in Indonesia, both past and current projects. Under each subheading, key documents, reports and products can be found for each project.

Strategies Against Flu Emergence (SAFE) Project (2011-2013) - Ongoing
Background

Indonesia continues to be the country with the most reported H5N1 Avian Influenza (AI) human cases in the world. It also has the highest AI human case fatality rate (84%) in part due to treatment delays. AI outbreaks in poultry have been reported in all of 33 provinces in Indonesia. Clearly AI is both a public health and business concern. To address this concern, USAID designed and awarded the Strategies Against Flu Emergence (SAFE) project. SAFE is a two-year project to support USAID/Indonesia’s Avian and Pandemic Influenza (API) Program to reduce the impact and transmission of avian influenza (AI) to animals and humans, and limit the emergence of a pandemic influenza virus. Led by Development Alternatives, Inc. (DAI), the SAFE project works to promote public-private partnerships, good poultry farming practices, improved biosecurity and hygiene behaviors at farms and markets, and improved care-seeking behavior for AI. As a core partner, CCP designs and implements strategic behavior change communication (BCC) campaigns targeted at workers along the poultry value chain and at poultry consumers at risk for AI.

Goals and Objectives

The goal of SAFE is to assist the Government of Indonesia and the private sector to strengthen their capacity in prevention and response to AI and other emerging pandemic threats. SAFE works with central and local government institutions, private sectors, NGOs, service providers, community groups and other stakeholders to accomplish program objectives. Activities under SAFE build upon the successess of and lessons learned from the Ministry of Agriculture (MOA), the Ministry of Health (MOH), local governments, Komnas/FBPI, the USAID funded Community Based AI Control (CBAIC) project and international partners. SAFE has four objectives:

Objective 1- Strengthen and expand public private partnership in high risk districts to improve biosecurity and good farming practices in order to limit AI transmission among poultry.

Objective 2- Promote behaviours that lower the risk of AI transmission among poultry in high risk districts using targeted behavior change communication strategies.

Objective 3- Increase knowledge of signs/symptoms and risk factors for AI-related illness in people and promote behaviors that improve household-level care-seeking in response to AI-related illness in high-risk district using targeted communication campaigns.

Objective 4- Facilitate coordination among partners by sharing information and hosting meeting.

Geographic Focus

SAFE operates in twelve selected high risk districts of West Java and Banten. The districts include: Lebak, Serang, Bandung, Bandung Barat, Garut, Bogor, Cianjur, Sukabumi, Tasikmalaya, Tangerang, Sumedang, and Ciamis.
Resources:

- **Health Care Utilization Survey in East Jakarta and Bogor District Indonesia Final Report**

This document comprises the final report and data analysis of a survey conducted in East Jakarta and Bogor district on the health seeking and health utilization behaviors of residents, with particular attention to ILI-like illnesses.

The survey was designed to generate estimates of the seasonal influenza disease burden and to determine the proportion of persons with ILI that seek care, their understanding of signs and symptoms that indicate the need for care and decision-making about when and where to seek care for respiratory illness. The findings from the HUS will be used in conjunction with enhanced surveillance data collected in a separate study by CDC/Jakarta for the purpose of developing disease burden estimates for seasonal influenza among East Jakarta district residents who present as outpatients with ILI or as hospitalized patients with SARI (e.g. pneumonia). This survey also aims to understand perceptions about exposure to birds and of the risk of H5N1 transmission. In addition, findings of the HUS will be used to inform preventive education strategies at the community level to reduce bird to human transmission of H5N1 virus and to reduce delays in care seeking that can result in higher than necessary mortality rates.

- **Aisyiyah and SAFE Empower Women to Create a Healthy Poultry Market**
This handout gives a brief description of the initiative taken by Aisyiyah (a female Muslim organization) using the teachings of Islam to inform women on the importance of safe poultry handling and to exercise their voice as consumers to demand cleanliness and safe practices at the poultry market.

- **Indonesia’s First Poultry Teaching Farms Open in Disease-control Effort**

This handout describes a partnership with Indonesia’s poultry industry and the USAID-funded SAFE project, which resulted in the opening of 12 poultry teaching farms in Western Java and the start of an international-standard disease prevention initiative on commercial broiler-poultry farms.

- **Strategies Against Flu Emergence (Project Overview, English)**

This is a one-page overview document of the major highlights of the SAFE project in English.

- **Strategies Against Flu Emergence (Project Overview, Bahasa Indonesia)**

This is a one-page overview document of the major highlights of the SAFE project in Bahasa Indonesia.

**Manual**

**Resources:**

- Panduan SMS
A guideline for SAFE field facilitator for conducting SMS campaign. It comprises methods of the SMS blast and content.

- **Panduan Pelaksanaan Kegiatan**

  A guideline for SAFE field facilitator for conducting grass root campaign/communication. It comprises methods and key messages.

- **Panduan Kegiatan Konsumen: Pengajian dan Kunjungan Konsumen**

  A guideline for SAFE field facilitator for conducting consumer empowerment program. It comprises methods and content.

- **Panduan Radio: Sandiwara Radio dan Talkshow**

  A guideline for SAFE field facilitator for conducting radio campaign. It comprises methods, frequency, and content.

- **Inisiatif Komunitas dan Pasar Sehat Program SAFE**

  An overview of SAFE program on healthy market and community empowerment program. A guideline for future programmers in conducting replication.

- **Pasar Sehat**

  A guideline for SAFE field facilitator in conducting grass root campaign on healty market program. It comprises key messages about healthy market.

- **Pangan Sehat dan Aman**
A guideline for SAFE field facilitator in conducting grass root campaign on consumer empowerment program. It comprises key messages about food safety and healthy poultry products.

• Selama Mawas Jika Badan Panas

A guideline for SAFE field facilitator in conducting grass root campaign on AI, particularly AI in human. It comprises methods of transmission, signs of AI, and act of preventions.

Research

Resources:

• Research: Healthcare Utilisation Survey in East Jakarta and Bogor Districts in Indonesia

An informational report on methods and findings of Healthcare Utilisation Survey conducted under SAFE in 2012.

• Research: Clinician's Knowledge, Attitude, and Practices in East Jakarta and Bogor Districts in Indonesia

An informational report on methods and findings of Knowledge, Attitude, and Practices of Clinicians regarding AI case management conducted under SAFE in 2012.

• Health Care Utilization Survey in East Jakarta and Bogor District Indonesia Final Report

This document comprises the final report and data analysis of a survey conducted in East Jakarta and Bogor district on the health seeking and health utilization behaviors of residents, with particular attention to ILI-like illnesses.
The survey was designed to generate estimates of the seasonal influenza disease burden and to determine the proportion of persons with ILI that seek care, their understanding of signs and symptoms that indicate the need for care and decision-making about when and where to seek care for respiratory illness. The findings from the HUS will be used in conjunction with enhanced surveillance data collected in a separate study by CDC/Jakarta for the purpose of developing disease burden estimates for seasonal influenza among East Jakarta district residents who present as outpatients with ILI or as hospitalized patients with SARI (e.g. pneumonia). This survey also aims to understand perceptions about exposure to birds and of the risk of H5N1 transmission. In addition, findings of the HUS will be used to inform preventive education strategies at the community level to reduce bird to human transmission of H5N1 virus and to reduce delays in care seeking that can result in higher than necessary mortality rates.

- **Inventarization Survey of Existing Biosecurity Measures and Attitudes to Biosecurity Improvement on Sector 3 Farms in Subang**

  The Report gave details on the implementation of study and findings of Inventarization Survey of Existing Biosecurity Measures and Attitudes to Biosecurity Improvement on Sector 3 Farms in Subang. The aim of this study was to provide information on the present biosecurity measures, farm infrastructure, poultry health, poultry management and productivity which are in place on sector 3 farms in Cipunagara and to measure farmers' attitudes and opinions towards biosecurity improvements.

- **Avian Influenza Field Trial Vaccination**

  The paper presents findings of a study on AI Field Trial Vaccination. The present study was part of module 3 and aimed to provide information about vaccination effectiveness as part of a national strategy to control and eradicate AI disease in Indonesia.

**IEC Materials**

**Resources:**

- **Bersama Lakukan 6 Perilaku Utama**
A communication material in a format of a poster highlighting 6 expected key bahavior from poultry farmer for preventing AI.

• Bersama Lakukan 4 Perilaku Utama

A communication material in a format of a poster highlighting 4 expected key bahavior from poultry transporter for preventing AI.

• Bersama Lakukan 5 Perilaku Utama

A communication material in a format of a poster highlighting 5 expected key bahavior from poultry slaughterer for preventing AI.

• Bersama Lakukan 6 Perilaku Utama

A communication material in a format of a poster highlighting 6 expected key bahavior from carcass vendor for preventing AI.

• Bersama Lakukan 2 Perilaku Utama

A communication material in a format of a poster highlighting 2 expected key bahavior from market manager for preventing AI.

• Bersama Lakukan 6 Perilaku Utama

A communication material in a format of a poster highlighting 6 expected key bahavior from consumer for preventing AI.

• Bersama Lakukan 8 Perilaku Utama
A communication material in a format of a poster highlighting 8 expected key bahavior from backyard poultry farmer for preventing AI.

- **Bersama Lakukan 6 Perilaku Utama**

A communication material in a format of a flyer highlighting 6 expected key bahavior from poultry farmer for preventing AI.

- **Bersama Lakukan 6 Perilaku Utama**

A communication material in a format of a poster highlighting 6 expected key bahavior from poultry collector for preventing AI.

- **Bersama Lakukan 4 Perilaku Utama**

A communication material in a format of a flyer highlighting 4 expected key bahavior from poultry transporter for preventing AI.

- **Selalu Mawas Jika Badan Panas**

A communication material in a format of a poster targeted at improving knowledge on signs of AI in human and steps need to be taken when someone is infected with the illness.

- **Bersama Lakukan 5 Perilaku Utama**

A communication material in a format of a flyer highlighting 5 expected key bahavior from poultry slaughterer for preventing AI.

- **Radio Drama "Bukan Salah Ayam" Episode 1 - 3**

This is the first three episodes of 12 part radio drama serial on Bukan Salah Ayam (Do not Blame the Chicken), produced by Strategies Against Flu Emergence (SAFE) project in 2012.
The story is about a curious couple, Cecep and Ratmi, who set off to investigate how a poultry market colleague contracted Avian Influenza. Over the course of their journey, Cecep and Ratmi visit a farm, a slaughterhouse and a poultry collector, and learn about poultry-raising practices and the many ways that improper handling of poultry can lead to Avian Influenza. Along the way, they fall in love. Meanwhile their colleague, Mr. Ajat, visits a community health center where he is referred to a public hospital for treatment and fortunately recovers from his illness.

- **Bersama Lakukan 2 Perilaku Utama**

A communication material in a format of a flyer highlighting 2 expected key behavior from market manager for preventing AI.

- **Radio Drama "Bukan Salah Ayam" Episode 4-6**

On these Episode 4-6, Cecep and Ratmi continue the investigation. This time they visit a slaughtering house in the area and find some interesting evidence there.

- **Bersama Lakukan 6 Perilaku Utama**

A communication material in a format of a flyer highlighting 6 expected key behavior from consumer for preventing AI.

- **Radio Drama "Bukan Salah Ayam" Episode 7-9**

On these episodes 7-9, investigation continue to traditional market. Tensions escalate during these episodes as Cecep and Ratmi find further leads.

- **Bersama Lakukan 8 Perilaku Utama**

A communication material in a format of a flyer highlighting 8 expected key behavior from backyard poultry farmer for preventing AI.
Radio Drama "Bukan Salah Ayam" Episode 10 - 12

On the last three episodes of the drama, listeners learn that every step along the Indonesian poultry supply chain impacts the quality of the chicken that is ultimately sold to consumers. Mistakes in any of the steps can lead to the transmission of Avian Influenza, which is deadly in 80 percent of cases in Indonesia. Listeners also learn about actions they can take to minimize their risk of contracting Avian Influenza and the importance of visiting their local community health center immediately if they are ill.

- **Konsumen Berhak Mendapatkan Produk Unggas yang Sehat dan Aman**

  A communication material in a format of a flyer targeted at consumer for improving their knowledge on signs of healthy chicken carcass.

- **Resep Masakan Ayam Sehat**

  A communication material in a format of a recipe brochure targetting at consumer.

- **Bersama Lakukan Perilaku Utama**

  A communication material in a format of a poster illustrating different players in poultry value chain.

Success Stories

Resources:

- **Consumer Empowerment Across West Java Province**

  The article shares story of Aisyiyah West Java Provincial Chapter initiative on replicating
SAFE Consumer Empowerment Program.

- **Market Poultry Vendors Increase Biosecurity Practices**

  The article shares story from the field on how market improvement program is being conducted under SAFE.

- **Livebird Markets and Communities Collaborate to Reduce AI Transmission Risk**

  The article gives highlights on SAFE approach in traditional market, its success and lessons. Collaboration among key stakeholders at the national level and in the field has given proof that partnership is the key ingredient to success.

- **Community Videos Spark Interest in Healthy Poultry Markets**

  The article shares story from the field on how alternative media being used for awareness and behavioral change campaign. The media in the story is community video.

- **From Inspired to Inspirational**

  The article shares story of one market manager from SAFE demonstration market who becomes a pioneer and leader for changes.

- **Citizen Journalism Takes on Social Change**

  The article shares story on how awareness raising and behavioral change is promoted through involvement and empathy.

- **Koran Verses Linked to Clean Markets and Healthy Poultry**
The article shares story of Aisyiyah activity in the field in promoting consumer key messages towards healthy behaviors through Quran reading group.

- **Radio Drama Series Highlights Poultry Value Chain Risks and Romance**

  The article shares story of radio drama production and airing under SAFE. The radio drama is one of SAFE’s communication tool for promoting healthy poultry.

- **Poultry Farmers Self-Finance Biosecurity Changes**

  The article shares story of SAFE teaching farms activity in the field and how this activity has inspired local farmers to apply biosecurity on their own.

- **Vocational School Improves Student Knowledge of Good Biosecurity and Farming Practices**

  The article shares story of SAFE effort in integrating biosecurity into high school curricula.

**Contacts**

**Community Based Avian Influenza Control Project (2006-2011) - Completed**

Insert several summary paragraphs here.

**Training**
See the "Training" tab above.

IEC Materials

Resources:

- Priority Audiences and Behaviors for Reducing the Risk of AI Transmission in Indonesia: Guidance for message consistency in behavior change communications and community mobilization initiatives

This document proves highly informative for anyone planning a behavior change communication campaign for AI in Indonesia. Based on formative research in Indonesia, this report provides guidance for messaging for behavior change communication and community mobilization for AI efforts. The priority audiences for AI prevention and key behaviors for the reduction of the risk of AI transmission are identified and described. This document was produced under the CBAIC project.

Print Materials

Resources:

- CBAIC Poster: 'Aksi 100% Bersih' Backyard Production

Informative poster created under the behavior change communication component of the CBAIC project. This poster lists key behaviors for backyard poultry farmers to reduce the risk of transmission of avian influenza.

- Petunjuk Umum Pencegahan Flu Burung (H5N1) Pada
Unggas Dan Manuisa (Risk Reduction Behaviors)

Produced under the CBAIC project, this booklet outlines behaviors that poultry producers can carry out in order to prevent H5N1.

Outdoor Media

Resources:

• CBAIC Banner: 'Aksi 100% Bersih' Live Bird Market

Informative banner created under the behavior change communication component of the CBAIC project. This banner was posted at live bird markets and lists key behaviors for market workers to reduce the risk of transmission of avian influenza.

Video Materials

Audio Materials

Merchandise

Logos & Taglines

Research

Resources:
Contact Structures of Broiler Farms in Cipunagara subdistrict, Subang With Special Reference to The Risk of Highly Pathogenic Avian Influenza Transmission

The report gave details on study arrangement and key findings of Contact Structures of Broiler Farms in Cipunagara, Subang, with special reference to the risk of HPAI transmission. The study was conducted on sector 3 broiler farms in the subdistrict of Cipunagara, Subang District, West Java Province during the period February to April 2009.

Health, Management and Productivity of Village Poultry in Cipunagara, Subang; a Cross-Sectional Survey

The report gave details of research arrangement and findings on Health, Management and Productivity of Village Poultry in Cipunagara, Subang. The purpose was to provide future interventions with better information on zones surrounding breeding farms. Specifically, the survey set out to collect information on the type and number of poultry kept in these zones, the health and productivity of this poultry and the husbandry practices which were being employed.

Commercial Poultry Private Sector Partnership Program: Year One

A key element of Community-Based Avian Influenza Control Project year three activities included development and implementation of a commercial poultry private sector partnership (PSP) program. This program was a technical assistance activity aimed at helping the Indonesian commercial poultry sector to better use their resources to prevent and control avian influenza (AI) and other poultry diseases. Ultimately, this program will reduce the risk of pandemic flu developing from H5N1 highly pathogenic avian influenza, a main objective of the USAID AI control program.

PSP program activities focused on western Java Island, specifically West Java province and parts of Banten province, where nearly thirty percent of the population of the entire country lives. The area also accounts for nearly seventy percent of all confirmed human and animal bird flu infections in the country. Year one of the commercial poultry PSP program concluded in September 2009. This document details the initial effects of the interventions on the Indonesian commercial poultry sector, and distills lessons learned and their implications for advancing the program during the upcoming nine-month CBAIC work extension. Initial program findings and accomplishments include: Creation of Sector 3 demand for biosecurity
services; Improved technical knowledge in the commercial poultry sector; Improved commercial poultry disease control related practices; Improved management practices and positive trends towards increased revenue; Analysis of technical services platforms.


This presentation captures USAID program progress in 2008-2009 by comparing 2008 versus 2009 data on knowledge, attitudes and practices (KAP) data on avian influenza (AI). In addition, data on the impact of a TV campaign from Jan-Apr 2009 are presented. This presentation lays out the data from these studies and evaluates their impact.

- Report of Detection of Avian Influenza Virus in Poultry Arriving at Poultry Collecting Facilities (PCFs) and Its Environment in DKI Jakarta Province (2008)

This is a Final Report of a study on Detection of Avian Influenza Virus in Poultry Arriving at Poultry Collecting Facilities (PCFs) and Its Environment in DKI Jakarta Province (2008). The aim of the study was to detect the presence of AI viruses in arriving poultry, to know the arrival frequency of AI infected poultry, to trace the farm or region of AI infected poultry coming to PCFs, and to assess biosecurity implementation in PCFs and poultry transportation vehicles.

- Antibody Responses to Avian Influenza Vaccination of Broiler Chickens in Indonesia

This report gave details on research findings on antibody responses to avian influenza vaccination of broiler chickens in Indonesia.

Contacts

Implementing the National Strategic Plan for
Avian Influenza (INSPAI) Project (2008-2011) - Completed

Insert several summary paragraphs here.

Resources:

- Implementing the National Strategic Plan for Avian Influenza (INSPAI): Final Report

This is a consolidated report of the Implementation of the National Strategic Plan for Avian Influenza (INSPAI)? project, funded by European Union (EU). The report highlights achievements towards project logical framework, covering all years period implementation from 11 December 2007 to 12 December 2011. The EU funded the INSPAI project through World Health Organization (WHO) to support Government of Indonesia in responding to Avian Influenza (AI). The project aimed to improve the accessibility and quality of health services for the community, has largely achieved its stated objectives and succeeded in disbursing its budget with significant results covering the four key strategic objectives of core public health:

1. Strengthen disease management including infection prevention and control.
2. Strengthen disease surveillance.
3. Promoting health through healthy food markets and health promotion.
4. Improved understanding of H5N1 infection through research.

The country capacity building in those core public health areas also strengthens country capacity in responding to other emerging infectious diseases such as H1N1. The Ministry of Health (MoH) implemented activities in close collaboration with WHO and the United Nation Office for Project Services (UNOPS).

The complete annexes are included in this report.

- Final Report of Implementing the National Strategic Plan for Avian Influenza (INSPAI)

Final Report of Implementing the National Strategic Plan for Avian Influenza (INSPAI) funded
by European Union. The project focused on case management, surveillance, healthy food market, risk communication and research.

Training

See 'Training' tab above

Resources:

- Referensi : Sosialisasi Flu Burung Bagi Petugas Pelayanan Kesehatan Dasar
  Avian Influenza Reference for Primary Healthcare Worker for Early Detection and Treatment

IEC Materials

Research

Contacts

DELIVER Project

Resources:

- ILI Surveillance Cold Chain Assessment Finding and Recommendation

The report was produced by the DELIVER Project under USAID. It contains findings and
recommendations of a Cold Chain Assessment for ILI surveillance in Indonesia. The report contains several attachments, including a series of pictures of the cold chain condition in various ILI facilities, and two questionnaires developed by DELIVER for Puskesmas and Regional Labs.

The Bahasa Indonesia version is also available here (“Assessment Cold Chain Kegiatan Surveilans ILI Temuan dan Rekomendasi”), although it does not contain all of the Attachments. Please refer to the English version for the full set of Attachments.

- **Standar Prosedur Operasional (SPO) Sistem Pengelolaan Cold Chain Kegiatan Surveilans ILI (Cold Chain SOP for ILI Surveillance)**

  The publication contains the Standard Operating Procedure (SOP) on cold chain management for ILI specimens. It supports the implementation of laboratory based ILI management case guideline. It is a complementary to the SOP for ILI Surveillance Laboratory Logistic Management and Guideline for Implementation of Surveillance Epidemiologi and ILI Virology at Primary Health Center (Puslit BMF, 2010), and SOP for specimen collection, packaging, and transportation (Puslit BMF, 2010).

- **DELIVER Project Presentation for Donor Coordination Meeting 3 May 2012**

  This is a presentation given at Technical Briefing Meeting on Donor Coordination, 3 May 2012. The presentation gave details on the scope of DELIVER project, its previous deliverables and achievements and plan for future activities.

- **Manajemen Logistik Dalam Menghadapi Pandemi Influenza**

  This publication is consists of guidelines for dealing with pandemics in terms of logistic support, distribution of personal protective equipment (PPE), and storage.

**Australia Indonesia Partnership for Emerging Infectious Diseases: Animal**
Health Program

Resources:

- **Australia Indonesia Partnership for Emerging Infectious Diseases: Animal Health Program**

This is a presentation given at Technical Briefing Meeting on Donor Coordination, 3 May 2012. The presentation gave introduction on the project of Australia Indonesia Partnership for Emerging Infectious Diseases: Animal Health Program

Capacity Development of Animal Health Laboratory in Indonesia

Capacity Development of Animal Health Laboratory is a project funded by JICA for the period of 2011 - 2015. It is implemented in Subang with the primary purpose to improve the quality and quantity of animal disease diagnosis service at Disease Investigation Centre.

Resources:

- **Capacity Development of Animal Health Laboratory in Indonesia: Introduction of Project Activities**

This is a presentation given at Technical Briefing Meeting on Donor Coordination, 3 May 2012. The presentation gave introduction on the Capacity Development of Animal Health Laboratory Project by JICA.

Construction of NVDAL Laboratory BSL-3

Resources:
Progress of NVDAL BSL-3 Construction

This is a presentation given at Technical Briefing Meeting on Donor Coordination, 3 May 2012. The presentation gave details on the progress of NVDAL Laboratory construction.

Developing Sustainable Surveillance and Response for Seasonal and Avian Influenza

Resources:

• CDC Presentation on Developing Sustainable Surveillance and Response for Seasonal and Avian Influenza

This is a presentation by CDC given at Technical Briefing Meeting on Donor Coordination, 3 May 2012. The presentation gave introduction on the program of Developing Sustainable Surveillance and Response for Seasonal and Avian Influenza.

Enhancing the Capacity of Government of Indonesia and Partners to Control HPAI

Resources:

• Enhancing the capacity of the Government of Indonesia and partners to control Highly Pathogenic Avian Influenza (HPAI)

This is a presentation given at Technical Briefing Meeting on Donor Coordination, 3 May
2012. The presentation gave introduction on the project of Enhancing Capacity of the Government of Indonesia and Partners to Control HPAI in Indonesia by FAO.

**HPED**

It is a project funding by EU via WHO Regional Office (SEARO) in New Delhi.

**IDENTIFY Project**

It is a USAID funding project via WHO Regional Office SEARO in New Delhi.

**Indonesian-Dutch Partnership Program on HPAI Control (Completed: 2007-2011)**

Since 2005, the government of The Netherlands has actively supported the development of control program for HPAI. This Government to Government collaboration resulted in 2007 in the establishment of the Indonesian-Dutch Partnership for the control of HPAI in Indonesia.

From the start, the major focus of the partnership activities was to develop control strategies for HPAI outbreaks in poultry. The development of these control programs was supported by several field and laboratory studies that generated insight in the efficacy of locally produced vaccines but also in the structure of the market chain and the whereabouts of the virus that causes avian influenza. These insights have been helpful in developing policies that can support control programs.

In addition, over the years, the partnership activities have shifted to support capacity development programs in local veterinary services and vaccine industry. The challenge was and still remains how this support can lead to sustainable results in the laboratories, at universities, and in the field.

**Resources:**

- Indonesia-Netherlands Partnership on HPAI 2005 - 2011
The presentation provided introduction and background of IDP Project and its main activities.

- **Report on Avian Influenza Surveillance of Chicken and Nomadic Duck Flocks in Cipunagara, Subang**

  The final report gave details on the implementation of the activities in Cipunagara Subang on the control and prevention of HPAI using multi-intervention approach.

- **Avian Influenza Surveillance in DKI Jakarta 2007 - 2010**

  The presentation was made at the IDP Project Closing Meeting. It provided explanation on the key findings of the Jakarta surveillance activity and its implications on policies, animal health/disease control, and public health in general.

- **Contact Structures of Broiler Farms in Cipunagara subdistrict, Subang With Special Reference to The Risk of Highly Pathogenic Avian Influenza Transmission**

  The report gave details on study arrangement and key findings of Contact Structures of Broiler Farms in Cipunagara, Subang, with special reference to the risk of HPAI transmission. The study was conducted on sector 3 broiler farms in the subdistrict of Cipunagara, Subang District, West Java Province during the period February to April 2009.

- **Health, Management and Productivity of Village Poultry in Cipunagara, Subang; a Cross-Sectional Survey**

  The report gave details of research arrangement and findings on Health, Management and Productivity of Village Poultry in Cipunagara, Subang. The purpose was to provide future interventions with better information on zones surrounding breeding farms. Specifically, the survey set out to collect information on the type and number of poultry kept in these zones, the health and productivity of this poultry and the husbandry practices which were being employed.
A Multi-Intervention Pilot Trial in Cipunagara, Subang

The presentation gave details on the implementation of multi-intervention pilot trial in Cipunagara, Subang, West Java, and lessons learned from it.

- Report of Supervision of Biosecurity and Poultry Health Management of Broiler Farms (Sector III) in Subang District

The report gave details on the implementation of Supervision of Biosecurity and Poultry Health Management of Broiler Farms in Subang District, West Java.

- Inventarization Survey of Existing Biosecurity Measures and Attitudes to Biosecurity Improvement on Sector 3 Farms in Subang

The Report gave details on the implementation of study and findings of Inventarization Survey of Existing Biosecurity Measures and Attitudes to Biosecurity Improvement on Sector 3 Farms in Subang. The aim of this study was to provide information on the present biosecurity measures, farm infrastructure, poultry health, poultry management and productivity which are in place on sector 3 farms in Cipunagara and to measure farmers’ attitudes and opinions towards biosecurity improvements.

- Pengembangan Database dan Sistem Informasi Geografis Industri Unggas untuk 7 Kabupaten/kota di Provinsi Banten dan untuk 12 Kabupaten/Kota di Provinsi Jawa Barat

This is the Final Report of Database and Geographic Information System Development for Poultry Industry in 7 Districts of Banten and 12 Districts of West Java. It gave details on the implementation of activities which were conducted in multiple stages from project preparation, desk study, development of database, preparation of manuals, test data base and customized manuals on the pilot site, the training of trainers (ToT), training for data collectors,
data collection and data management (data collection, data input and data analysis, development of GIS map), project reporting and final follow up. The report is available in English and Bahasa Indonesia.

- **Laporan Pelaksanaan Kegiatan Studi Banding Program Pengendalian AI di Viet Nam, Hanoi, 9-13 Maret 2010**

  This is the report of a Comparison Study conducted by Ministry of Agriculture of the Government of Indonesia to Viet Nam. The report gave details on the implementation of comparison study to Viet Nam on AI control.

- **Demographic Profiling and Pilot Survey Activities of Commercial Poultry Producers in Purwakarta and Subang Districts of West Java Province, Indonesia**

  The Report gave details on the implemention and findings of the Demographic Profiling Commercial Poultry Producers in Purwakarta and Subang Districts of West Java Province. The purpose of this project was to profile commercial poultry producers and their operations in the two districts and to provide an interface by which this profiling information can be continually updated and used by interested parties.

- **Report on the implementation of Training of Trainers and evaluation of District/Municipality field staff training on HPAI prevention and control at Banten Province**

  This report is available in English and Bahasa. It gave details on the implementation of ToT of District Field Staff on HPAI Prevention and the evaluation of the field staff training in Banten province. It provided inputs for preparation and implementation of the next series of courses in order to improve the quality of the next training.

- **Avian Influenza Field Trial Vaccination**

  The paper presents findings of a study on AI Field Trial Vaccination. The present study was part of module 3 and aimed to provide information about vaccination effectiveness as part of
a national strategy to control and eradicate AI disease in Indonesia.

- **Report of Detection of Avian Influenza Virus in Poultry Arriving at Poultry Collecting Facilities (PCFs) and Its Environment in DKI Jakarta Province (2008)**

  This is a Final Report of a study on Detection of Avian Influenza Virus in Poultry Arriving at Poultry Collecting Facilities (PCFs) and Its Environment in DKI Jakarta Province (2008). The aim of the study was to detect the presence of AI viruses in arriving poultry, to know the arrival frequency of AI infected poultry, to trace the farm or region of AI infected poultry coming to PCFs, and to assess biosecurity implementation in PCFs and poultry transportation vehicles.

- **Antibody Responses to Avian Influenza Vaccination of Broiler Chickens in Indonesia**

  This report gave details on research findings on antibody responses to avian influenza vaccination of broiler chickens in Indonesia.

- **Annual Report of Implementation of AI Vaccine Surveillance Cooperation between National Veterinary Drug Assay Laboratory (NVDAL) and Wageningen-UR**

  The Report gave details on the implemention of AI vaccine surveillance cooperation between National Veterinary Drug Assay Laboratory (NVDAL) and Wageningen-UR. The goal of the activities was to monitor the quality including potency, and safety (inactivation test) of inactivated AI vaccine that are currently available in Indonesia.

- **Final Report of Avian Influenza Surveillance in Poultry Collecting Facilities in DKI Jakarta Province**

  This report is available in English and Bahasa. The report gave details on the implementation of AI surveillance program (April ? June 2007) in PCFs in DKI Jakarta Province. The activity was conducted by Wageningen International in collaboration with the Provincial Livestock,
Fisheries, and Marine Services Office of DKI Jakarta and Center for Indonesian Veterinary Analytical Studies (CIVAS). The program objectives were to assess the existence of AI virus in PCFs in DKI Jakarta Province and to identify risk factors of AI virus infection in the PCFs.

• **Poultry Sector Survey**

The paper provides a comprehensive description of poultry production sector and the map of poultry sector distribution in Bandung and Cianjur; which was expected to become valid reference in the surveillance implementation policy and vaccination strategy at field level.

• **Capacity Building Veterinary Services**

The presentation gave details on the scope of activities of IDP Project in West Java that included capacity building for field district technician, capacity building of animal health laboratory, and mapping system poultry farms.

• **Vaccination as part of control measures for Highly Pathogenic Avian Influenza (H5N1)**

The presentation gave inputs on efficacy of locally produced vaccines and efficiency of AI vaccination in layers, broilers and back yard poultry as a result of the studies conducted by IDP Project.

**Live Bird Market Rehabilitation and Cleaning and Disinfection Station**

A project by FAO in collaboration with Ministry of Agriculture.

**Resources:**

• **Live Bird Market Rehabilitation and Cleaning and Disinfection Station Designs by FAO-Market Team**
Indonesia

The document provides description and designs for live bird market rehabilitation and cleaning and disinfection station.

Strengthening Surveillance Activities

The project was implemented by WHO in collaboration with Ministry of Health.

The components included:

- Operational support for DSOs in ten high risk provinces (all of Java, N Sumatra, Lampung, Bali and S Sulawesi)
- Refresher training for DSOs
- Human ? animal interface linking, including ?Four Way Linking? project
- Lab network refresher training and procurement
- Severe Acute Respiratory Infection (SARI) surveillance at three hospitals in Western Java
- EWARS technical support, and training and procurement in Central Java

Strengthening the Health System for Acute Respiratory Infections

The project has four components, namely:

1. Case management including oxygen therapy
2. Pandemic preparedness
3. Hospital infection prevention and control
4. Strengthening surveillance
   - Support for district surveillance officers
   - Support for EWARS (Early Warning Alert and Response System)
   - Support for labs including ILI and SARI

This is a USAID funding project, implemented by WHO in collaboration with Ministry of Health.

It has focus on zoonotic influenza, primarily H5N1.
Strengthening the Human Health Surveillance System for Emerging Infectious Diseases Detection and Response

The project has five components, namely

1. Support for EWARS in three provinces (Maluku, N Maluku, NTT)
2. Strengthening Event Based surveillance through Outbreak Command Post at MoH
3. Support for FETP
4. Support for Outbreak Response
5. Zoonosis control (new component)

It is an AusAID funding project implemented by WHO in collaboration with Ministry of Health with focus on EIDs Response including zoonoses.

Zoonosis Control

The project is implemented by WHO in collaboration with Ministry of Health.

It builds on previous grant to respond to rabies in Bali, with expected outputs:

1. Trained Human Resources including rapid response team members on integrated zoonotic diseases surveillance available
2. Field investigation reports available on priority zoonotic diseases, especially avian influenza
3. Advocacy and Agreement for Healthy Food Markets program continued in selected provinces
4. Advocacy and Agreement for integrated rabies prevention campaign in high risk provinces
5. Expert recommendations for improved management of priority zoonotic infections
6. Trained human resources at district level in cost effective animal bite case management in selected provinces
7. Trained human resources at district level in effective lepto case management in selected provinces
8. Trained human resources at district level in avian influenza case management in selected provinces
Research

Number of research have been conducted for API. This section contains results of the research.

Resources:

- **Research: Clinician's Knowledge, Attitude, and Practices in East Jakarta and Bogor Districts in Indonesia**

  An informational report on methods and findings of Knowledge, Attitude, and Practices of Clinicians regarding AI case management conducted under SAFE in 2012.


  This presentation captures USAID program progress in 2008-2009 by comparing 2008 versus 2009 data on knowledge, attitudes and practices (KAP) data on avian influenza (AI). In addition, data on the impact of a TV campaign from Jan-Apr 2009 are presented. This presentation lays out the data from these studies and evaluates their impact.

- **Report of Detection of Avian Influenza Virus in Poultry Arriving at Poultry Collecting Facilities (PCFs) and Its Environment in DKI Jakarta Province (2008)**

  This is a Final Report of a study on Detection of Avian Influenza Virus in Poultry Arriving at Poultry Collecting Facilities (PCFs) and Its Environment in DKI Jakarta Province (2008). The aim of the study was to detect the presence of AI viruses in arriving poultry, to know the arrival frequency of AI infected poultry, to trace the farm or region of AI infected poultry coming to PCFs, and to assess biosecurity implementation in PCFs and poultry transportation vehicles.
Communication Materials & Media

Numbers of communication materials and media have been developed in the past decade in the areas of API. These materials were mainly focusing on improving knowledge and encouraging key behaviours on how to prevent API and respond to API. Under this section, audience of this toolkit can find samples of these Information, Education, and Communication materials.

Resources:

- **Pemakaian Alat Perlindungan Diri (How to Use PPE)**
  
  This poster provides guidelines on how to wear Personal Protective Equipment (PPE) correctly.

- **Cara Mencuci Tangan Dengan Sabun dan Air (How to Wash Hands with Soap and Water)**
  
  This poster provides guidelines on how to correctly wash hands with soap and water.

- **Etika Batuk Saat Anda Batuk atau Bersin (Ethics for coughing or sneezing)**
  
  This poster provides guidelines on protective measures to prevent the spread of microbes when one sneezes or coughs.

- **Pencegahan Penyakit Flu Burung Dalam Tinjauan Islam (Prevention of AI According to Islamic Perpective)**
  
  This publication is intended as a pocket-sized book for sermons and describes AI prevention from the Islamic perspective. Islamic scholars may use this resource during mass praying or Quran recitation events.
SAFE Project campaign: "Cek Semua Bersih"

CBAIC Project campaign: '100% Bersih'
Campaign

Click here to access the library of media information & education communication materials that were produced under the CBAIC project:
archive.k4health.org/toolkits/avian-and-pandemic-influenza-resources-indonesia/iec-materials-0

Resources:

- Petunjuk Umum Pencegahan Flu Burung (H5N1) Pada Unggas Dan Manuisa (Risk Reduction Behaviors)

Produced under the CBAIC project, this booklet outlines behaviors that poultry producers can carry out in order to prevent H5N1.

FAO Emergency Center for Transboundary Animal Diseases (FAO ECTAD) Indonesia

USDA/APHIS Biosecurity for Poultry Production and Distribution

Government of Indonesia Ministry of Agriculture Communication Materials
Training

This section lists trainings that have been conducted for AI prevention and response in Indonesia. The curricula, modules and other training materials are available here.

Resources:

- Referensi : Sosialisasi Flu Burung Bagi Petugas Pelayanan Kesehatan Dasar
  Avian Influenza Reference for Primary Healthcare Worker for Early Detection and Treatment

Live Bird Market Cleaning & Disinfectant Training

Live Bird Market Manager Training

Market Chain Cleaning and Disinfection Training

Resources:

- Personal Protective Equipment (PPE)/Alat Pelindung Diri (APD)
  Personal Protective Equipment is part of the subject on Market Chain Cleaning and Disinfection Training by FAO.
The Principles of Decontamination in Poultry Market Chain/Prinsip-Prinsip Dekontaminasi di Rantai Pasar Unggas

The Principles of Decontamination in Poultry Market Chain is part of the subject on Market Chain Cleaning and Disinfection Training by FAO.

- **SOP of Washing and Disinfection Activities in Poultry Markets/SOP Kegiatan Pencucian & Disinfeksi Di Pasar Unggas**

Standard Operating Procedure (SOP) of Washing and Disinfection Activities in Poultry Markets is part of the subject on Market Chain Cleaning and Disinfection Training by FAO.

- **SOP for Cleaning and Disinfection of Poultry Transporting Vehicles and Baskets/SOP Pembersihan dan Disinfeksi pada Kendaraan dan Keranjang Pengangkut Unggas**

Standard Operating Procedure (SOP) for Cleaning and Disinfection of Poultry Transporting Vehicles and Baskets is part of the subject on Market Chain Cleaning and Disinfection Training by FAO.

- **SOP Use and Maintenance of High Pressure Washer Machine/SOP Penggunaan dan Perawatan Alat Semprot Bertekanan Tinggi**

Standard Operating Procedure (SOP) for Use and Maintenance of High Pressure Washer Machine is part of the subject on Market Chain Cleaning and Disinfection Training by FAO.
Standard Operating Procedure (SOP) for Use and Maintenance of High Pressure Washer Machine is part of the subject on Market Chain Cleaning and Disinfection Training by FAO.

• Threats and Problems of Bird Flu/Flu Burung Ancaman dan Permasalahannya

This is an opening presentation for Market Chain Cleaning and Disinfection Training. The presentation provided details on threats and problems of bird flu, particularly in Indonesia.

Training on Communication

Resources:

• Pengujian Alat Komunikasi di Kabupaten Sleman, Provinsi DIY

The article gives detail arrangement of the training, including objectives, participants, and outline for curriculum.

Publications on API

Numbers of papers have been developed in the past decade on API. Some of them were developed based on best practices and lessons learned from project activities, while the others were developed based on research and observation in the field. This section compiles these paper and is divided into grey literature and peer-reviewed publication.

Resources:
Poultry Sector Survey

The paper provides a comprehensive description of poultry production sector and the map of poultry sector distribution in Bandung and Cianjur; which was expected to become valid reference in the surveillance implementation policy and vaccination strategy at field level.

Peer-reviewed publications

Resources:

- A Single Vaccination of Commercial Broilers Does Not Reduce Transmission of H5N1 Highly Pathogenic Avian Influenza

This is an Open Access article published by Veterinary Research distributed under the terms of the Creative Commons Attribution License. The paper presents findings on the investigation of whether vaccination is able to reduce HPAI H5N1 virus transmission among broiler chickens.

- Estimation of Transmission Parameters of H5N1 Avian Influenza Virus in Chickens

This is an open-access article distributed under the terms of the Creative Commons Attribution License. This paper presents findings on key epidemiological parameters of H5N1 highly pathogenic influenza viruses in their avian hosts. The research in this manuscript was funded by the Dutch Ministry of Agriculture, Nature and Food Safety, and was carried out within the framework of the Indonesian-Dutch partnership for the control of avian influenza in Indonesia.

- An Inactivated H5N2 Vaccine Reduces Transmission of Highly Pathogenic H5N1 Avian Influenza Virus Among Native Chickens
The paper was published on Vaccine Journal by Elsevier. This paper presents findings on two transmission experiments with H5N1 virus (A/chicken/Legok/2003) in vaccinated and unvaccinated native chickens.

- **Field trial for assessment of avian influenza vaccination effectiveness in Indonesia**

  This research was funded by the Dutch Ministry of Agriculture, Nature and Food Quality and was carried out for the Indonesian-Dutch Bilateral Programme on the Control of HPAI in Indonesia. The paper presents findings of a Field trial assessment of avian influenza vaccination effectiveness in Indonesia. The aim of this field study was to determine the efficacy of vaccination against highly pathogenic avian influenza (HPAI) virus strain H5N1 in Indonesia.

- **Sero-response against avian influenza A/H5N1 among poultry workers in Jakarta**

  The summary paper presents result of a study on seroresponse against AI among poultry workers in Jakarta.

- **PD50 experiments demonstrate that avian influenza vaccines used in Indonesia differ greatly in protective capacity**

  The summary paper presents result of a study comparing inactivated Avian Influenza vaccines that are used to control the outbreak of AI in Indonesia.

- **Sero-prevalence of avian influenza A/H5N1 among poultry farmers in rural Indonesia**

  The summary paper presents result of a study on sero-prevalence of AI among poultry farmers in rural Indonesia.
Indonesian H5N1 vaccines can reduce transmission of avian influenza virus among layers

The summary paper presents the results of the study that quantify H5N1 transmission in experimental groups of layers after double vaccination with homologous vaccines.

- Estimation of the critical proportion of chickens in a flock to be immunized to prevent major outbreaks of HPAI H5N1

This summary paper estimates the critical proportion of chickens in a flock to be immunized to prevent major outbreaks of HPAI H5N1. The experiment conducted using experimental and observational data.

Grey literature

Resources:

- Penyebaran Virus Avian Influenza (AI) Pada Rantai Pemasaran Unggas

The article gives details on AI dissemination in poultry distribution chain, particularly in market. It also gives recommendation on what steps need to be taken to prevent the virus from spreading.

- Towards control of avian influenza H5N1 virus in Indonesia: Human infection, and the role of live bird markets

This resource links to the PhD dissertation of Dr Gina Samaan, who completed her PhD by publication in 2011 after working for a number of years in WHO Indonesia. The title of the
PhD is ?Towards control of avian influenza H5N1 virus in Indonesia: Human infection, and the role of live bird markets.? The PhD thesis had two aims: (a) to examine the epidemiology of human AI H5N1 infection and, (b) to inform disease control measures in live bird markets (LBMs) in Indonesia. The epidemiological findings discussed in this thesis can be used to reduce the risk of zoonotic transmission of the virus, prevent secondary human cases in clusters and provide baseline comparison for the early detection of changes in virus transmissibility. The LBM studies demonstrated that control measures can be introduced in LBMs in a low resource setting such and that the interventions should reflect resources available, stakeholder needs and critical control points. The thesis can be viewed in the Australian National University’s Digital Theses Collection via the link provided here.

Click here to access Dr Gina Samaan's PhD dissertation in the Australian National University's Digital Theses Collection.

- **Peran Pasar Unggas Tradisional dalam Penyebaran Virus Avian Influenza**

  This publication provides detailed description on how AI is being transmitted in traditional live bird market. The article also provides suggestions on what steps can be taken to prevent virus transmission in such market.

- **Asia Pacific Strategy for Emerging Diseases**

  This document outlines a common strategic framework for countries and areas of the South East Asia and Western Pacific Region region to strengthen their capacity to manage and respond to emerging disease threats, including influenza pandemics. This was first launched in 2005. Over the past five years it has been updated to include 8 focus priority areas: 1) Surveillance, Risk assessment, and Response; 2) Laboratories; 3) Zoonoses; 4) Infection Prevention and Control; 5) Risk Communication; 6) Public Health Emergency Preparedness; 7) Regional Preparedness, Alert, and Response; and 8) Monitoring and Evaluation.

- **Building a Plane while Flying It (Perjalanan KOMNAS FBPI 2006-2010)**
This publication provides a description on AI in Indonesia and Komnas FBPI journey from 2006-2010. Permission to include this publication on the API Resources for Indonesia eToolkit has been provided by the Government of Indonesia KOMNAS FBPI. The text is presented in both English and Bahasa Indonesia.

- **Transisi Participatory Disease Surveillance and Respons (PDSR) Menuju Layanan Veteriner Nasional (National Veterinary Services/NVS)**

  This publication provides detailed description on PDSR, its structure and works. It also examines the strength and weaknesses of the PDSR system and what opportunities available to improve it.

- **Priority Audiences and Behaviors for Reducing the Risk of AI Transmission in Indonesia: Guidance for message consistency in behavior change communications and community mobilization initiatives**

  This document proves highly informative for anyone planning a behavior change communication campaign for AI in Indonesia. Based on formative research in Indonesia, this report provides guidance for messaging for behavior change communication and community mobilization for AI efforts. The priority audiences for AI prevention and key behaviors for the reduction of the risk of AI transmission are identified and described. This document was produced under the CBAIC project.

- **Biosecurity For Highly Pathogenic Avian Influenza: Issues and Options**

  This paper moves forward from the discussion presented in the FAO/OIE/World Bank position paper on The importance of biosecurity in reducing HPAI risk on farms and in markets, prepared for the Inter-Ministerial Conference on Avian and Pandemic Influenza, held in New Delhi in December 2007. It draws on what we already know about biosecurity, particularly for countries endemically infected with HPAI or at high risk of introduction, identifies problems, proposes solutions and outlines a future course of action. Among others, it looks at
the basic principles of biosecurity within the overall framework of disease control, discusses species- and sector-specific issues, stresses the importance of situating biosecurity in appropriate economic and cultural settings, and makes the case for the role of communication.

- United States Government Avian Influenza and Pandemic Influenza Prevention and Control Efforts in Indonesia: Program Assessment

In June 2008, the Avian Influenza (AI) Working Group of the US Embassy in Jakarta commissioned an assessment of the USG’s AI assistance program to Indonesia. The objectives were to (1) determine progress and achievements to date; (2) analyze gaps and constraints; and (3) make recommendations about strategic directions for the future. The information in this report is current as of mid-June 2008, when the assessment was conducted.

- One World, One Health: A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human-Ecosystem Interface

This document presents a strategic framework for applying the “One World, One Health” concept, which establishes an interdisciplinary and cross-sectoral approach, to preventing epidemic or epizootic disease and for maintaining ecosystem integrity. Chapters 1 and 2 discuss the global experience with highly pathogenic avian influenza (HPAI) and lessons learned from this experience.

- Wild Birds and Avian Influenza: An introduction to applied field research and disease sampling techniques

This publication is intended as an introductory manual to support field efforts with regard to the study of bird populations and ecological aspects of avian influenza viruses. The topics covered in this manual address monitoring technologies and sampling techniques, wild bird surveillance, some features of habitat use and migration ecology.

A Bahasa Indonesia version of this document, entitled "Burung Liar dan Flu Burung: Pengantar Riset Lapangan Terapan dan Teknik Pengambilan Sampel Penyakit" is also
Logistics & Procurement

In the event of a pandemic, uncertainty is foreseen as one factor that hinder smooth and effective case management. In light of this and learning from the previous experience, a solid management system regarding logistic and procurement is needed. USAID has funded some activities in this area. As a result of the activities, some documents have been developed. This section contains guiding documents and standard operating procedure for logistic and procurement in the event of pandemic.

Resources:

- **Standar Prosedur Operasional (SPO) Sistem Pengelolaan Cold Chain Kegiatan Surveilans ILI (Cold Chain SOP for ILI Surveillance)**

  The publication contains the Standard Operating Procedure (SOP) on cold chain management for ILI specimens. It supports the implementation of laboratory based ILI management case guideline. It is a complementary to the SOP for ILI Surveillance Laboratory Logistic Management and Guideline for Implementation of Surveillance Epidemiologi and ILI Virology at Primary Health Center (Puslit BMF, 2010), and SOP for specimen collection, packaging, and transportation (Puslit BMF, 2010).

- **Getting Products to People: The JSI Framework for Integrated Supply Chain Management in Public Health**

  This publication describes a framework for integrated supply chain management for public health commodities developed by John Snow, Inc. (JSI).


  This handbook offers practical guidance in managing the supply chain, with an emphasis on
health commodities. This handbook will be particularly useful for program managers who design, manage, and assess logistics systems for health programs. In addition, policymakers, system stakeholders, and anyone working in logistics will also find it helpful as a system overview and overall approach. Key terms and concepts are clearly defined and explained; the document includes detailed information about the design and implementation of logistics management information systems and inventory control systems. Overviews of quantification, procurement processes, as well as storage, transport, and product selection, are also included.

- **Supervision and On-the-Job Training for Supply Chain Management at the Health Facility**

Supervision guidelines serve as a resource for both supervisors and supervisees in how to prepare for a supervision visit, what to expect during a visit, and what follow-up actions should be taken post-visit. A sample supervision checklist complete with job aids provides county programs with ready-to-use guidelines that can easily be adapted and customized according to country-specific contexts.

- **Laboratory Standardization: Lessons Learned and Practical Approaches**

Based on the experience of the Deliver Project-USAID in supporting countries during the laboratory standardization process, this paper provides a detailed definition and description of laboratory standardization, outlines the benefits, and offers some suggested approaches for implementing standardization in-country.

- **Laboratory Logistics Handbook**

The importance of quality laboratory services is indisputable. The expansion of programs for human immunodeficiency virus and acquired immunodeficiency syndrome (AIDS), tuberculosis, and malaria requires strong and supportive laboratory services. For antiretroviral therapy (ART) in particular, there has been a growing recognition of this importance, given the number of laboratory tests required to effectively diagnose and monitor AIDS treatment. The need to improve laboratory services for all of these disease programs provides an opportunity to strengthen laboratories in health systems overall so they can accommodate the needs of the communities they serve. This document describes the function and organization of laboratory services and the commodities needed for laboratory services, and it discusses supply chain considerations for management of laboratory
commodities.

- **Lessons Learned in Managing National Laboratory Supply Chains**

  This document will highlight some of the key lessons learned by the Deliver Project-USAID in strengthening laboratory logistics systems and implementing good supply chain practices to the laboratory setting.

- **Manajemen Logistik Dalam Menghadapi Pandemi Influenza**

  This publication is consists of guidelines for dealing with pandemics in terms of logistic support, distribution of personal protective equipment (PPE), and storage.

- **Planning and Implementing a Logistic System Design Activity**

  This publication outlines a step-by-step methodology for designing and implementing a system of public health commodities delivery.

- **Logistics System Assessment Tool**

  The Logistics System Assessment Tool (LSAT), developed by the DELIVER project, is used to assess a logistics system and the system?s environment. The LSAT, a diagnostic and monitoring tool, can be used to complete an annual assessment as an integral part of the work planning process. The information collected using the LSAT is analyzed to identify issues and opportunities and, from those, used to outline further assessment and/or appropriate interventions. Because assessments using the LSAT are conducted and analyzed in successive years, the results can be used to monitor and improve system performance; and to provide critical data that can identify a country?s commodity security strengths and weaknesses. Either public or private sector supply chains can use the LSAT.

- **Assessment Tools for Laboratory Services (ATLAS) 2006**
The Assessment Tool for Laboratory Services (ATLAS) 2006 is a data gathering tool developed by the DELIVER project to assess laboratory services and logistics. The ATLAS is a diagnostic and monitoring tool that can be used as a baseline survey to complete an annual assessment or as an integral part of the work planning process. The ATLAS is primarily a quantitative tool with a small sample qualitative facility survey of available commodities and equipment. The information collected by using the ATLAS is analyzed to identify issues and opportunities and to outline further assessment and/or appropriate interventions.

- **Strengthening Laboratory Systems through Investments in Supply Chains**

  A chart on the process of strengthening laboratory system.

**Logistic**

Pada halaman ini bisa kita temukan dokumen mengenai:

1. SOP Laboratorium
2. dqwdqw

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**Source URL:** https://www.k4health.org/toolkits/safe-indonesia