



Analysis of Highly Pathogenic Avian Influenza Surveillance System in Domestic Poultry from different Source Database: SIKHNAS, INFOLAB AND PDSR, 2008 -2009

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Introduction

Three sources of HPAI information on the surveillance system at national level

1. SIKHNAS



2. PDSR



3. INFOLAB



Objectives








- To describe the results of village-level HPAI surveillance in six Java Districts and the Province of Bali between May 2008 and September 2009
- Recommend ways to enhance HPAI surveillance

Methods: Study areas

Six Java Districts and the Province of Bali



Legend :

	Serang		Situbondo
	Tasikmalaya		Banyuwangi
	Ciamis		Bali Province
	Blitar		



Methods

Three surveillance programs were described

1. PDSR

2. SIKHNAS

3. INFOLAB

- Collaborative surveillance program between MoA and FAO for HPAI
- Surveillance program under MoA for animal diseases
- Laboratory surveillance program focusing on laboratory diagnosis

collection



Entry



Fields



Validation

Result: objectives of the system

SIKHNAS	PDSR	INFOLAB
Capture all important animal diseases	<ul style="list-style-type: none">• Specific to HPAI in village poultry and small scale commercial poultry• Outbreak containment information	Focusing in laboratory result

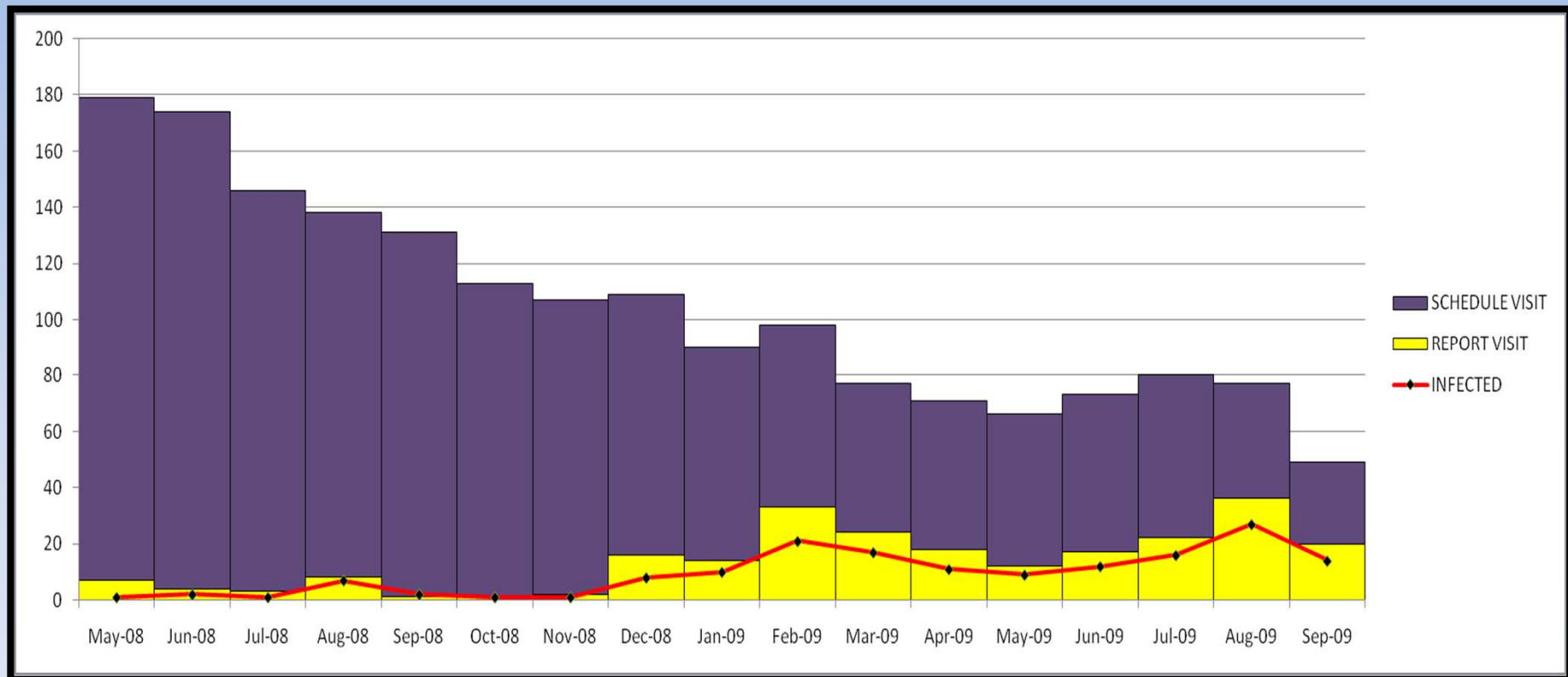
Result : Data Flow and Collection

SIKHNAS	PDSR	INFOLAB
Sub-district veterinary post → Districts → Province → DGLS	PDSR officers → LDCC(Province) → Ministr y of Agriculture -FAO collaborating centre	Field sample → Laboratories (DICs) → Ministry of Agriculture
Firebird SQL	Visual Basic and Access database	Access database

Result: PDSR by Village (May 2008-Sept 2009)

Area	Total villages	Total villages visited	HPAI Detected by village
Tasikmalaya	335	290	42 (14.48 %)
Serang	372	94	24 (25.53 %)
Ciamis	343	118	4 (3.39 %)
Banyuwangi	192	122	11 (9.02 %)
Blitar	248	89	3 (3.37 %)
Situbondo	136	91	6 (6.59 %)
TOTAL for 6 districts	1,626	804	90 (11.19 %)
Bali	717	682	57 (8.35 %)

Monthly PDSR Surveillance Activity and Village Status between May 2008 and September 2009 in Six Districts and Bali Province



Result of SIKHNAS Surveillance (May 2008-Sept 2009)

District/Province	No. of Cases	Death	Culling
Tasikmalaya	704	n.a.	46
Banyuwangi	1,554	n.a.	n.a.
Situbondo	200	n.a.	n.a.
Blitar	5	n.a.	n.a.
Serang	1,115	n.a.	n.a.
Ciamis	n.a	n.a.	n.a.
Bali	2,039	996	408

Result of INFOLAB Surveillance May 2008-Sept 2009

District/ Province	Total number of village	Number of Village submitted sample	Infected Village (positive to PCR or Viral Isolation)
Tasikmalaya	335	29	22 (75%)
Serang	372	3	0 (0%)
Ciamis	343	3	0 (0%)
Banyuwangi	192	0	0 (0%)
Blitar	248	4	2 (50%)
Situbondo	136	0	0 (0%)
Total for 6 district	1,626	39	24 (61.5%)
Bali	717	66	18 (27%)

Discussion (1)

PDSR

- High coverage
- Need lots of resources i.e. man power and budget
- Final diagnosis based on Rapid Test kit
(Loth et al, 2008)
- Clinical notifications from communities were effective in finding HPAI case and may be related to routine scheduled visits

Discussion (2)

INFOLAB

- Reliable final diagnosis based on virus isolation laboratory result

SIKHNAS

- The data was incomplete → difficult to describe disease occurrence

Conclusions

- Each surveillance system for HPAI in Indonesia has its strengths and weaknesses.
- Comparing these three surveillance data sources can illustrate a clearer picture of how surveillance for HPAI in Indonesia has been working and how it could be improved.

How to improve HPAI surveillance system in Indonesia?

- Passive clinical notifications from communities was the most effective way for early response
- Sharing information and resources at every level and among different systems is needed to reduce costs and improve effectiveness of surveillance
- Further assistance is needed to improve effective surveillance for HPAI in Indonesia.

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i afraid this to political, i need some sugesst

user, 12/02/2011

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- **Centers for Disease Control and Prevention (US.CDC)**
- **Food and Agriculture Organization (FAO)**
- **FETPV staff**

Thank you of Attention