

Influenza Surveillance in General Practice

A collaborative project



Prepared by
Gösta Liljeqvist
Public Health Officer
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Influenza, GPs and Public Health

1. Flu and Public Health
2. Where does influenza surveillance data come from ?
3. How does General Practice fit in to the picture?
4. A description of the collaborative project of Influenza Surveillance in General Practice in NSCCAHS and Networks of General Practice

Humans and flu

Influenza in humans possibly began as a result of domestication of animals

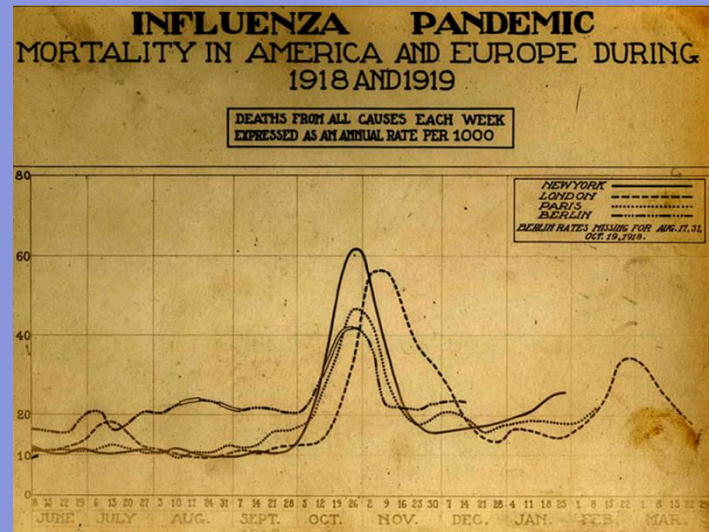


Severity

Influenza severity ranges from mild, or even unnoticeable illness to catastrophic and sometimes fatal sickness



Influenza pandemics

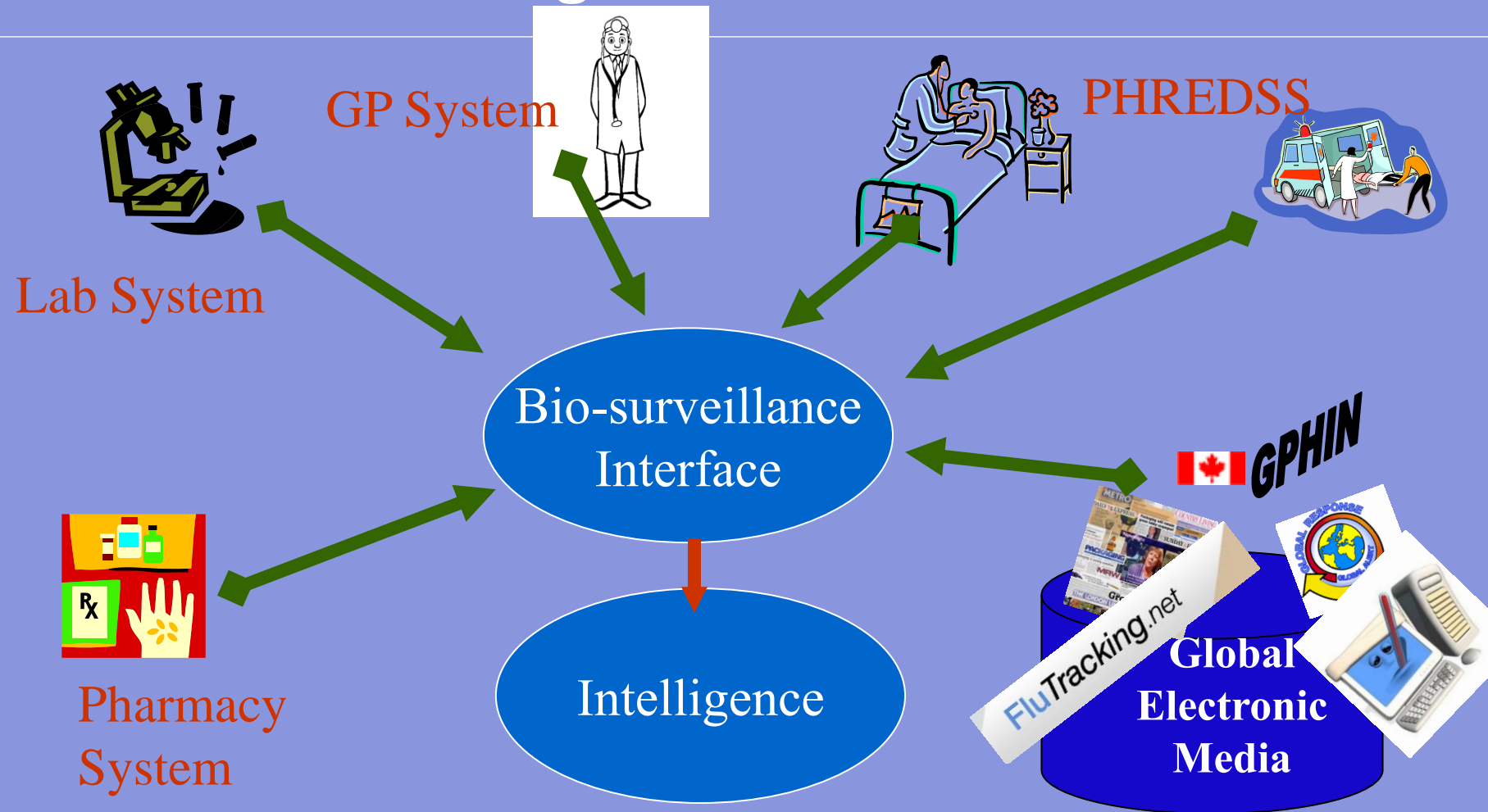


Inter-pandemic influenza

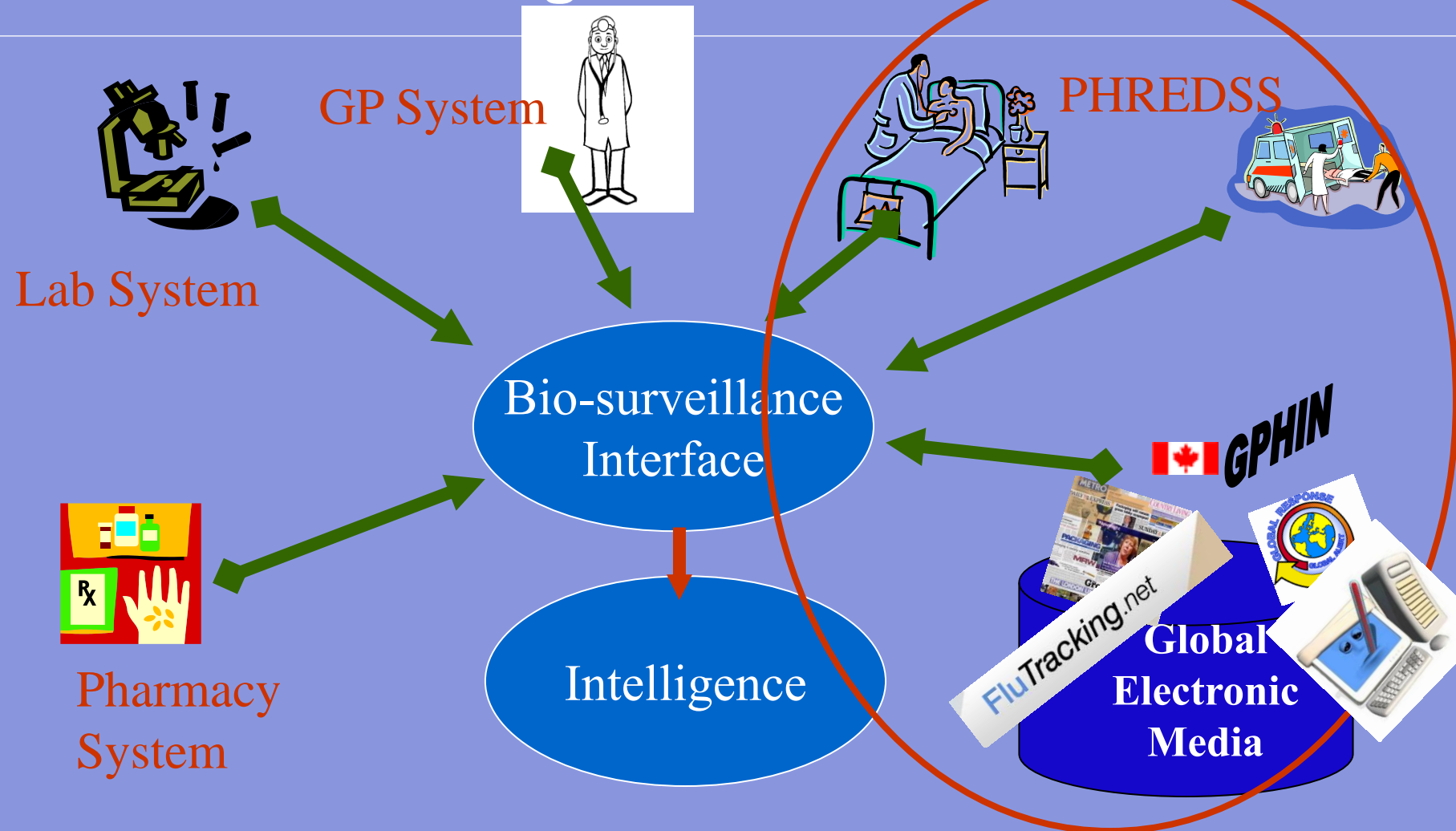
- A billion influenza cases per year world wide
- 3 million – 5 million cases of severe illness
- 300 000 – 500 000 deaths per year
- In developed countries Influenza probably infects about 20 percent of the population each season



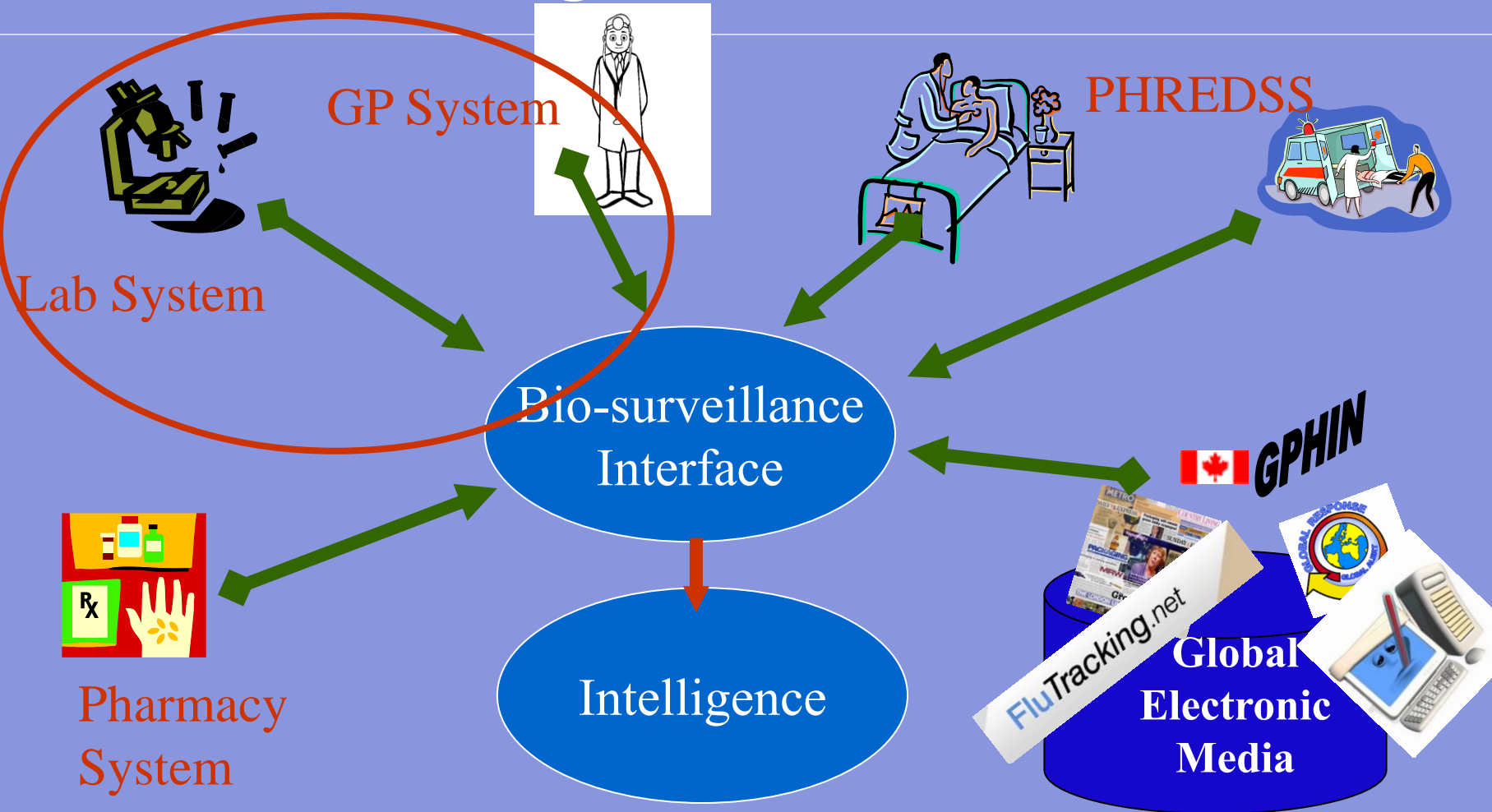
Finding flu: Data sources



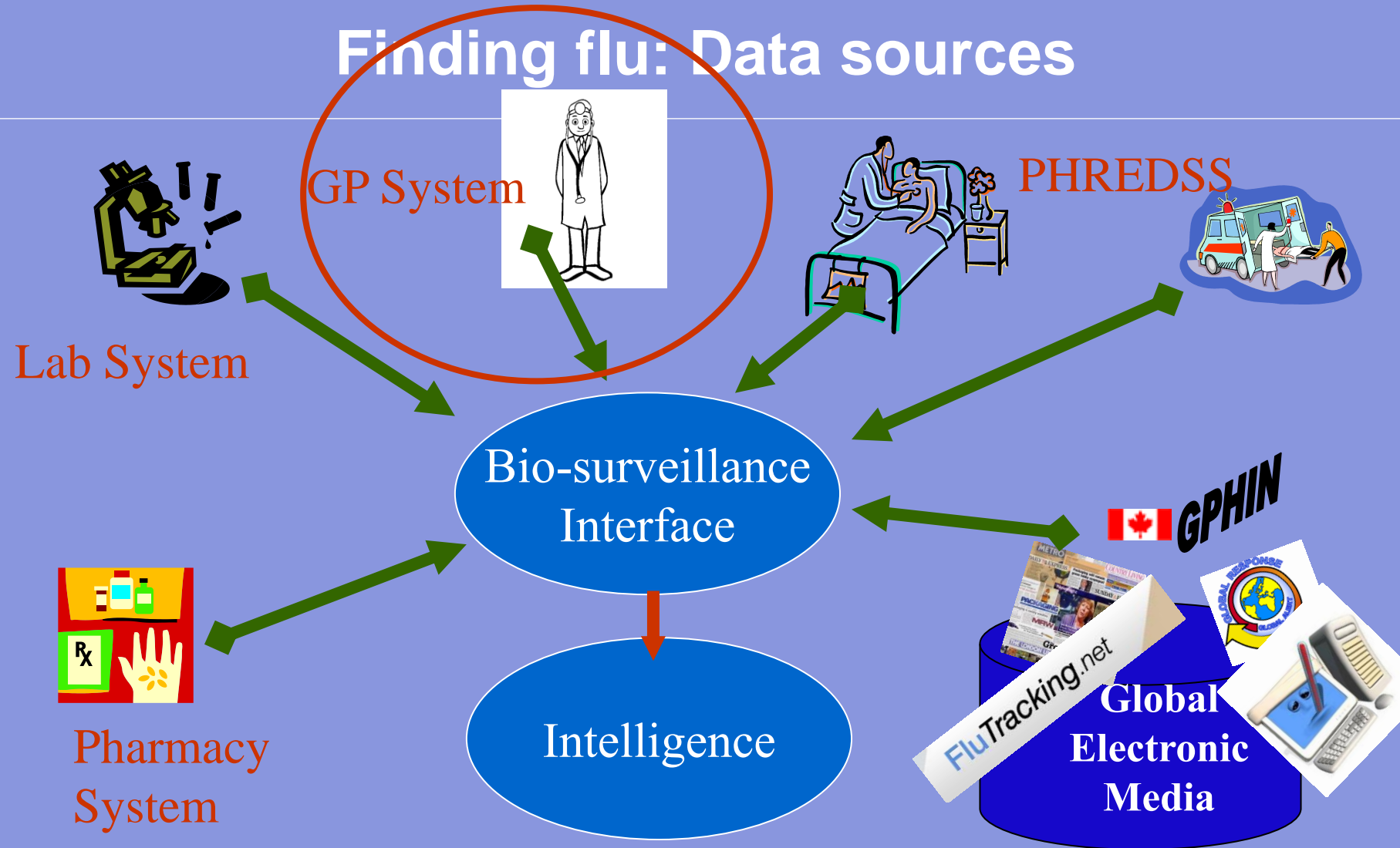
Finding flu: Data sources



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Finding flu: Data sources



Last Week's Flu report NSW Health

Figure 1: Comparison of weekly influenza-like illness presentations to NSW emergency departments, 2005-2010*

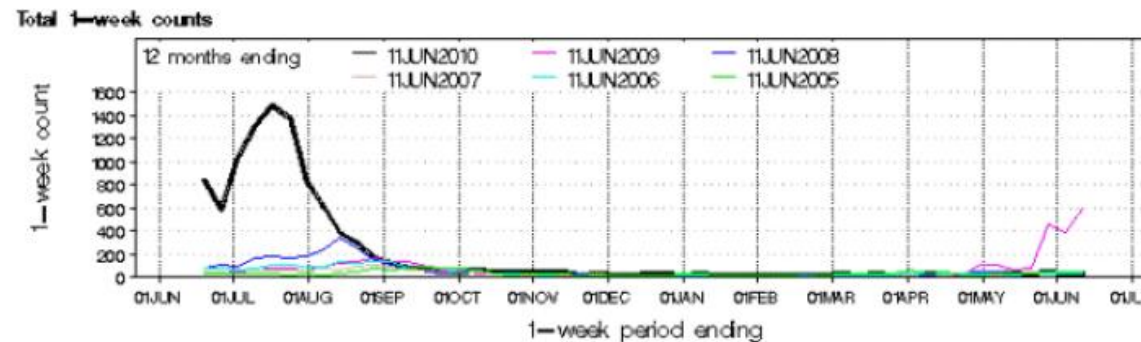


Figure 2: Weekly counts of admissions to hospital for influenza-like illness from NSW emergency departments, 2005-2010*.

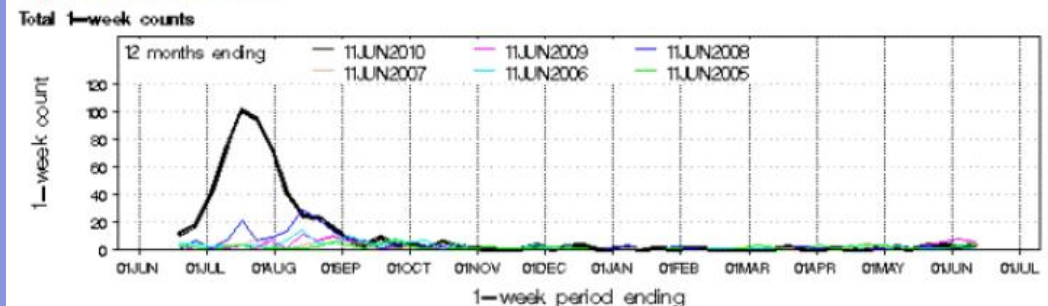
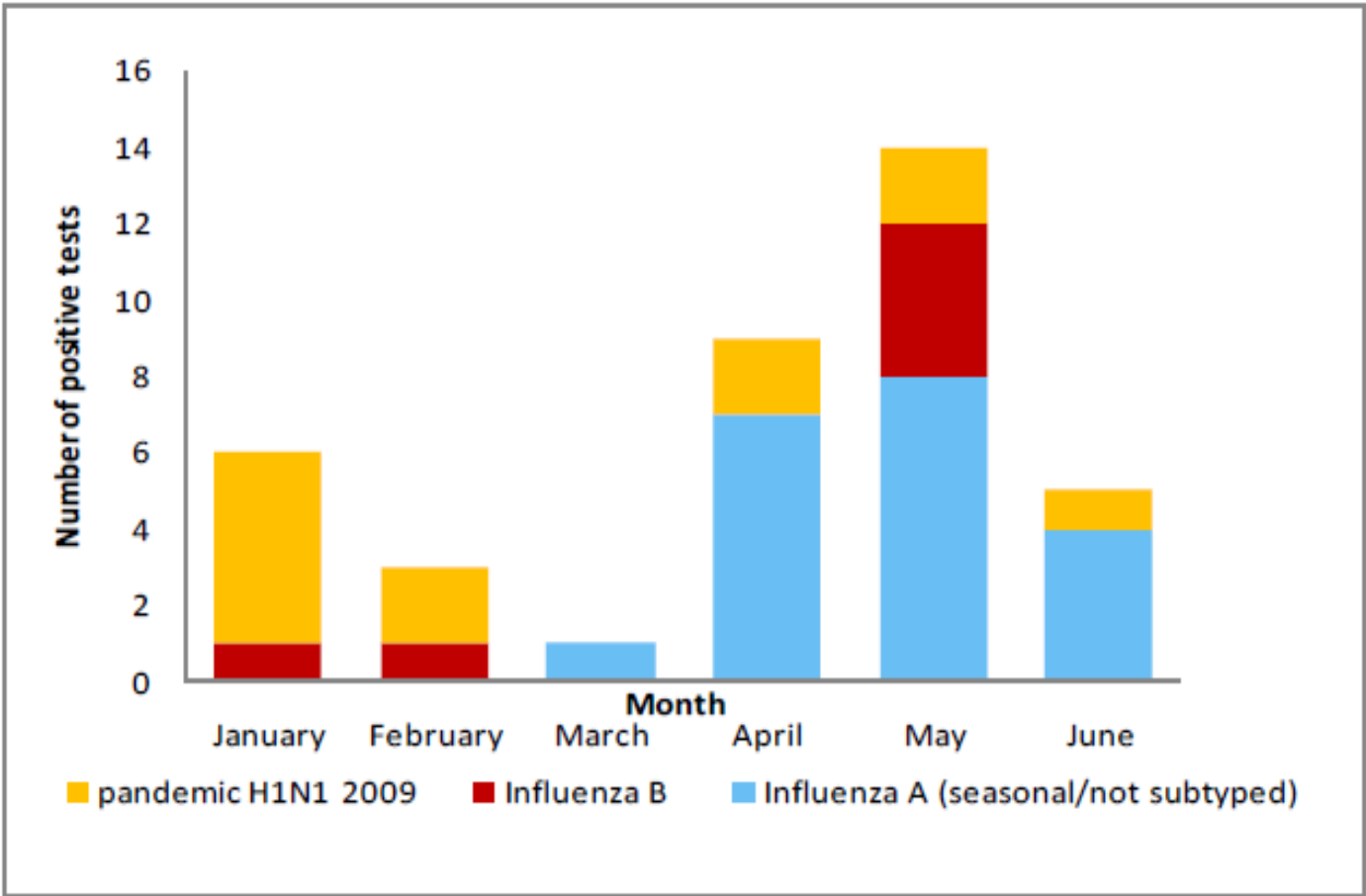


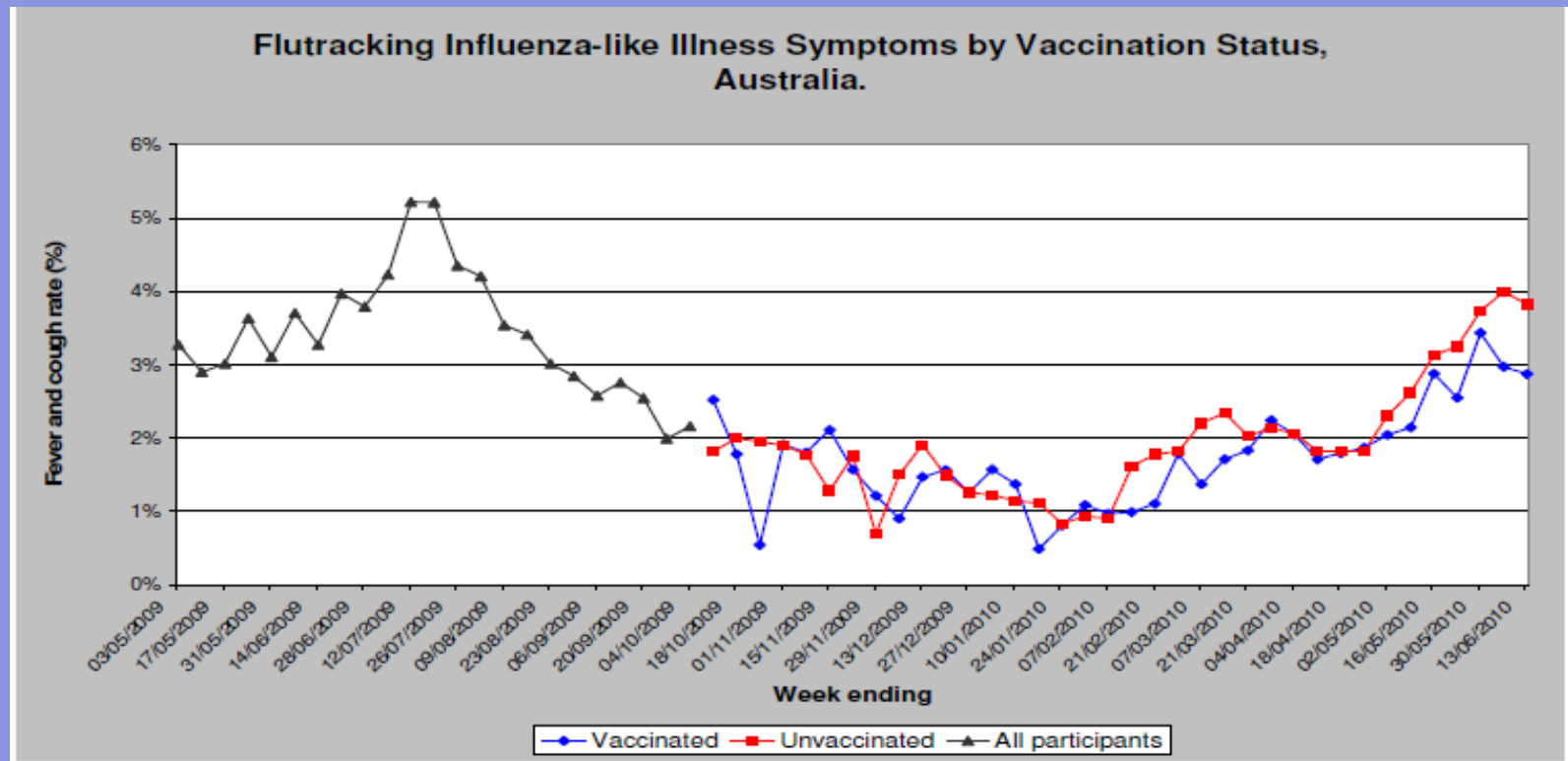
Figure 3: Number of positive laboratory tests for influenza by month ending 11 June 2010



Note:

- The last month shown in Figure 3 is the month to date
- Data is accurate at time of report but may alter in subsequent weeks when subtyping results become available
- Influenza a (seasonal includes all influenza A not subtyped). Excludes point of care tests, there is no data available for Sydney Adventist Hospital. Influenza laboratory diagnoses using virology are reported by South Eastern Area Laboratory Services (SEALS), Institute of Clinical Pathology and Medical Research (ICPMR), The Children’s Hospital at Westmead (CHW), South West Area Pathology Services (SWAPS), Pacific Laboratory Medicine Services (PaLMS), Royal Prince Alfred Hospital (RPAH), Hunter Area Pathology Services (HAPS), Douglas Hanley Moir (DHM), VDRIlab from 5 March 2010 and Lavery and Nepean from 1 April 2010.

Flutracking



Who goes to a GP?

- It is likely that general practitioners see a large proportion of ILI sufferers in the community
- The severity of illness is likely to be lower than among those who present at an ED



Community influenza prevalence

Deaths

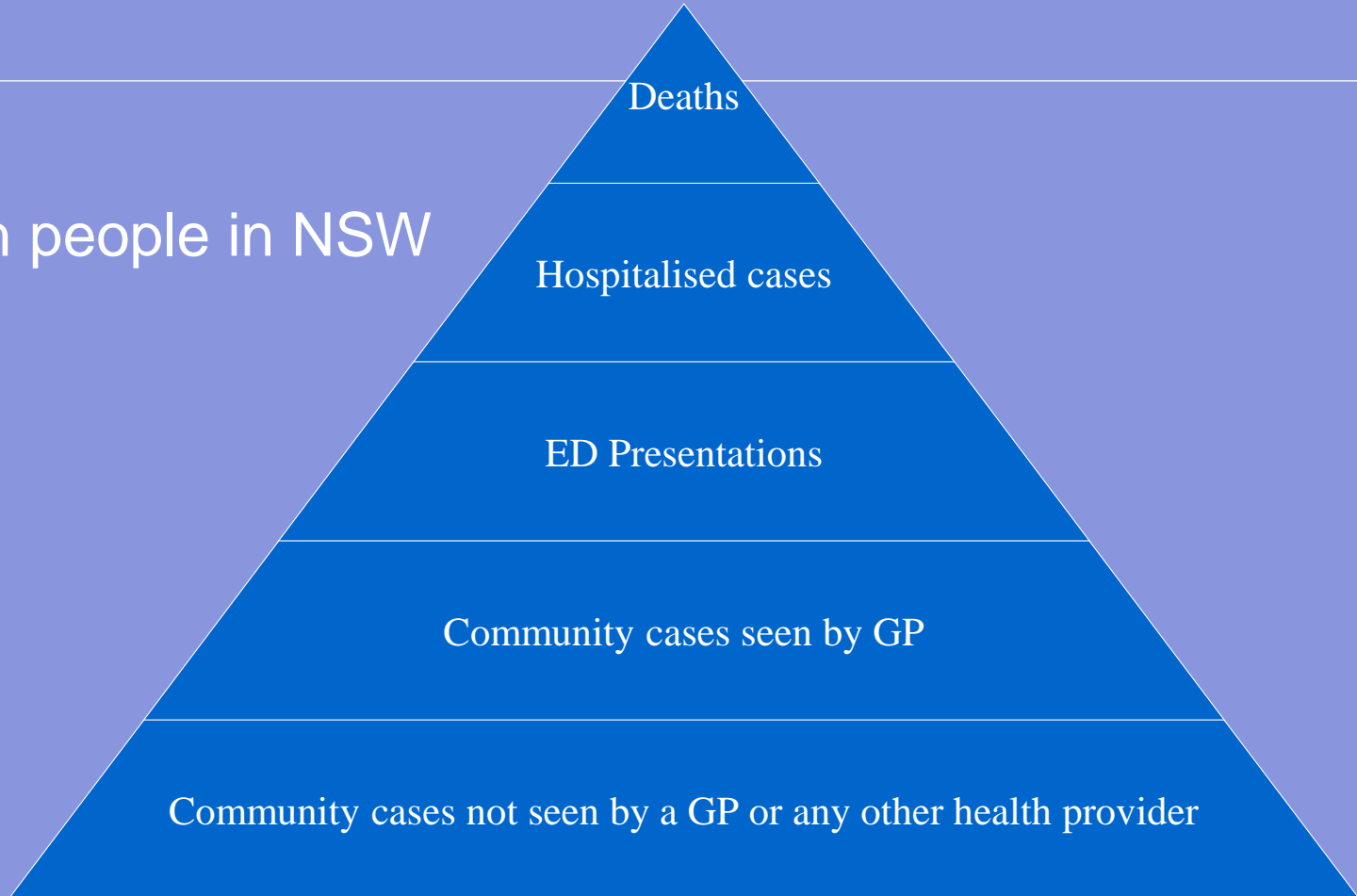
Hospitalised cases

ED Presentations

Community cases seen by GP

Community cases not seen by a GP or any other health provider

? 1.4 Million people in NSW



NSW HEALTH

NSW General Practitioner Sentinel Surveillance Program (for Influenza-Like-Illness)

ILI Activity Log

On the form below, record ALL patients you treat on a nominated surveillance day who had influenza-like illness and then fax this form together with copies of the completed sentinel surveillance Pathology Request Forms to your local public health unit.

1. General Practitioner's details:

Name:
Address:



Phone number:
Fax number:

2. Surveillance day (Mon-Fri) and date: WEDNESDAY (day), 29 / 07 / 2009

3. Number of patients seen with an influenza-like illness (defined as: fever AND fatigue AND cough) on surveillance day/session: 10

4. Number of patients seen (for any illnesses) on surveillance day/session: 45

5. Day ILI activity log

Patient No.	Age (yrs)	ATS (Y/N)
1	22 mths	N
2	31 yrs	N
3	12 yrs	N
4	14 yrs	N
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Nasal / Throat
" "
" "
" "

*Aboriginal or Torres Straight Islander
** A maximum of five specimens are to be collected as part of the GP Sentinel Surveillance Program / week

INSTRUCTIONS

- If required, use additional forms.
- Please return this form by fax to Northern Sydney Central Coast Public Health Unit, Fax number: (02) 9482 1358, by 11am each Monday.
- Please start a new form each week.
- If you have any questions please do not hesitate to contact the Public Health Unit on

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Nasal / Throat
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" "

The Australian Sentinel Practices Research Network

- ASPREN has experienced problems in gaining acceptance by GPs in its configuration to date
- but is now developing a Canning extraction tool

Notification

Date: 01/07/2009

Illness:

Influenza like illness

Has a sample been requested/sent to the lab for viral PCR testing of this patient? Yes

Date of Birth: 01/03/2000

Has patient received influenza vaccination this year? Select one...

Gastroenteritis

Chicken Pox

Shingles

Gender:

Male Female

Age Range:

< 1 year 50 - 64 years

1 - 4 years 65 - 74 years

5 - 19 years >= 75 years

20 - 49 years

Clear Form | Notify

Notification

Date: 22/06/2009

Illness:

Influenza like illness

Gastroenteritis

Chicken Pox

Shingles

Gender:

Male Female

Age Range:

< 1 year 50 - 64 years

1 - 4 years 65 - 74 years

5 - 19 years >= 75 years

20 - 49 years

Clear Form | Notify

Notification

Date: 27/11/2009

Illness:

Influenza like illness

Has a sample been requested/sent to the lab for viral PCR testing of this patient? Yes

Date of Birth: [dropdown]

Has patient received influenza vaccination this year? Select one...

Gastroenteritis

Chicken Pox

Shingles

Gender:

Male Female

Age Range:

< 1 year 50 - 64 years

1 - 4 years 65 - 74 years

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Notification

Date: 27/11/2009

Illness:

Influenza like illness

Has a sample been requested/sent to the lab for viral PCR testing of this patient? Yes

Date of Birth: [dropdown]

Has patient received influenza vaccination this year? Select one...

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Gender:

Male Female

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Clear Form | Notify

ASPREN Form Segment


 Notification

Date: 

Illness:

Influenza like Illness

Has a sample been requested/sent to the lab for viral PCR testing of this patient?


Date of Birth 

Has patient received influenza vaccination this year?

Gastroenteritis

Chicken Pox

Shingles



- Select one...
- None
- Seasonal only
- H1N1 (2009) only
- Seasonal + H1N1 (2009)
- Unknown

Gender:

Male Female

Age Range:

< 1 year 50 - 64 years

1 - 4 years 65 - 74 years

5 - 19 years >= 75 years

20 - 49 years

Influenza Surveillance in General Practice

A project funded by NSCCAHS

Collaborators:

- Northern Sydney Central Coast Area Health Service Public Health Unit
- GP Network Northside
- Northern Sydney General Practice Network
- NSW Central Coast Division of General Practice
- Manly Warringah Division of General Practice
- Canning Division of General Practice
- NSW Health Centre for Epidemiology and Research

The Project Aims

- To assess if it is possible and practical to access Influenza syndromic surveillance data from GP electronic medical records by using automated data extraction
- To offer a complementary syndromic surveillance tool for improved influenza intelligence
- To attempt to ascertain if Influenza Like Illness patterns in General Practice differ from those in Emergency Departments