



中国疾病预防控制中心
CHINESE CENTER FOR DISEASE CONTROL AND PREVENTION

SURVEILLANCE SYSTEMS OF NOVEL INFLUENZA VIRUS IN CHINA

Zhou Lei

Chief of Branch for Emerging Infectious Disease
Public Health Emergency Center, China CDC

Sept. 9, 2018





Surveillance Systems

- **Identification approach**

- ✓ **Notifiable infectious disease surveillance system**

- Medical institutions at all levels

- ✓ **Pneumonia of Unknown Etiology (PUE) surveillance system**

- Medical institutions at all levels

- ✓ **Influenza like illness (ILI) surveillance --outpatients**

- Covered 31 provinces, involved 554 sentinel hospitals, 408 network labs

- ✓ **Severe acute respiratory illness (SARI) surveillance – hospitalized cases**

- Covered 25 provinces, involved 25 sentinel hospitals, 25 network labs

- ✓ **Local pneumonia surveillance system**



Surveillance Systems

- **Emergency Surveillance**

- ✓ **More samples collected during the epidemic season**

- 20 samples/week from Oct. to Mar. for Northern provinces
- 10-40 samples/week for Southern provinces

- ✓ **Poultry workers with symptoms were tested when positive sample collected in their working environment or poultry they were exposed to**

- ✓ **Strengthen surveillance when AIV cases were identified**

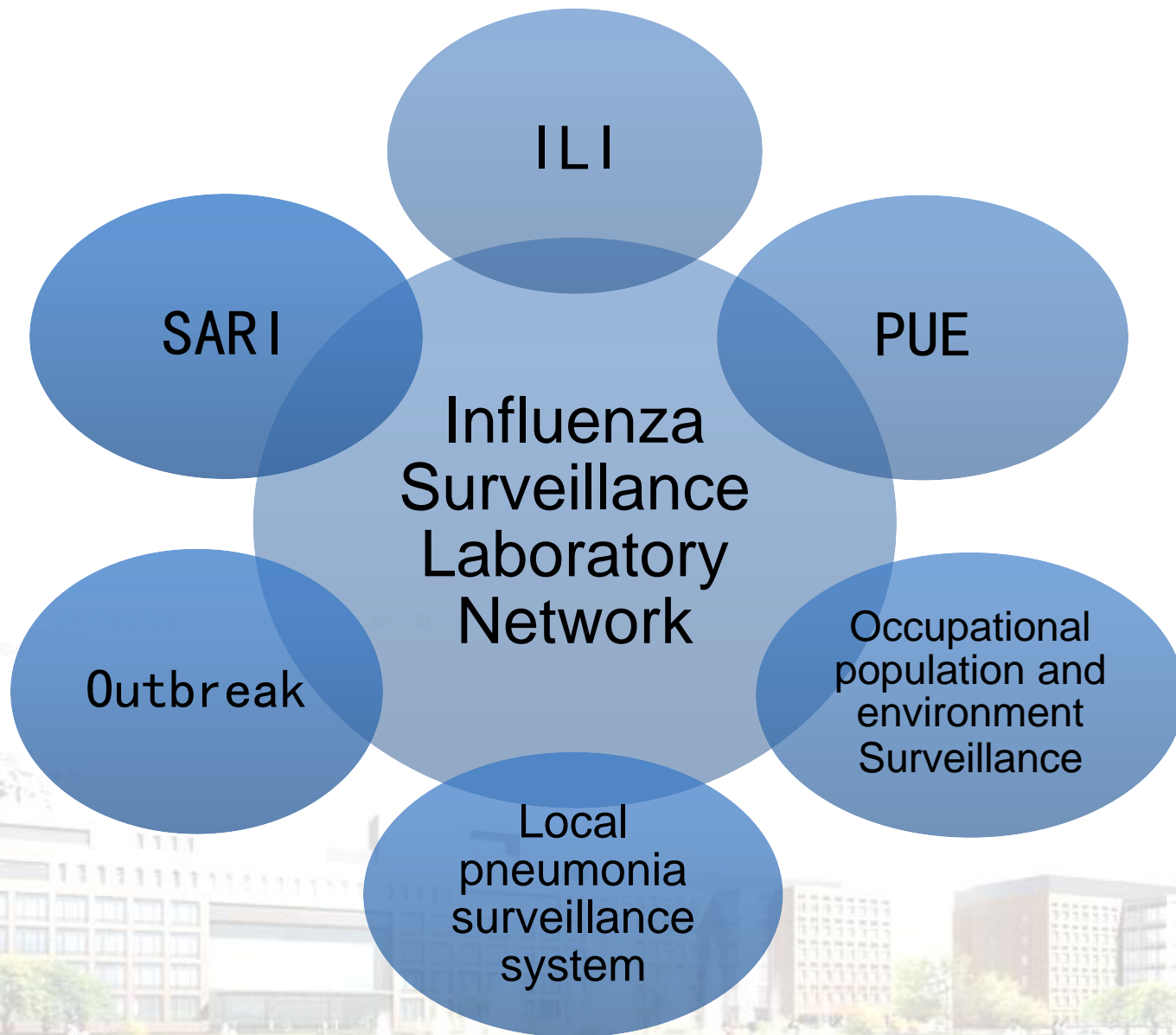
- Collect samples of all ILI/SARI cases and tested for 2 weeks at the county level

- ✓ **Monitoring of close contacts**

- 10 days follow-up for close contacts
- Samples collected and tested when contacts developed any symptoms



Surveillance Systems



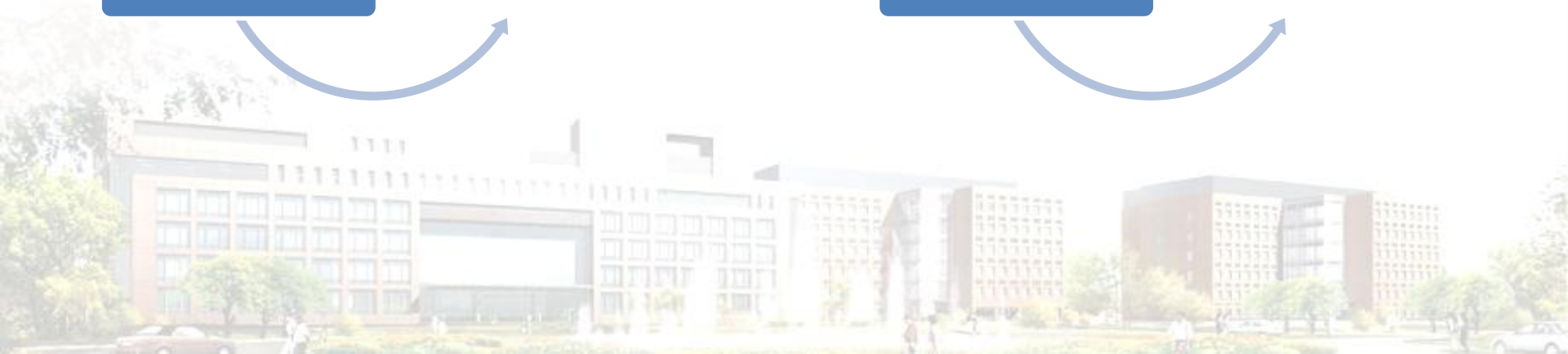
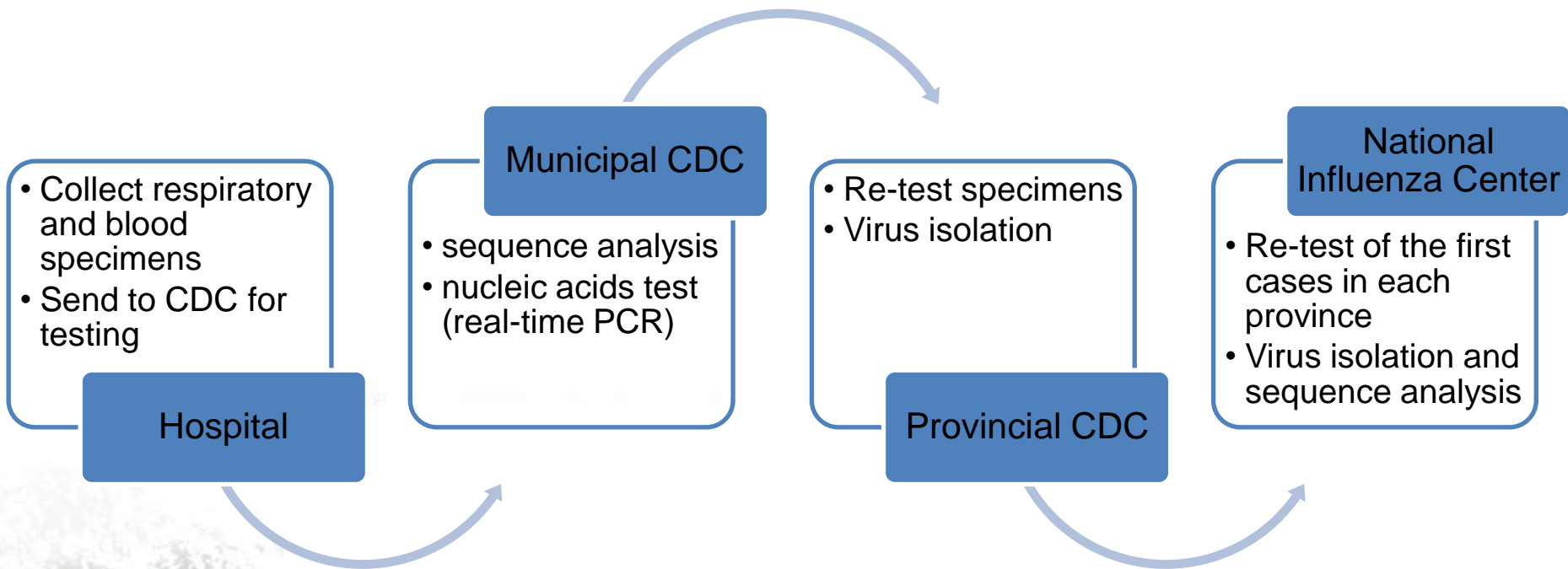


Information systems



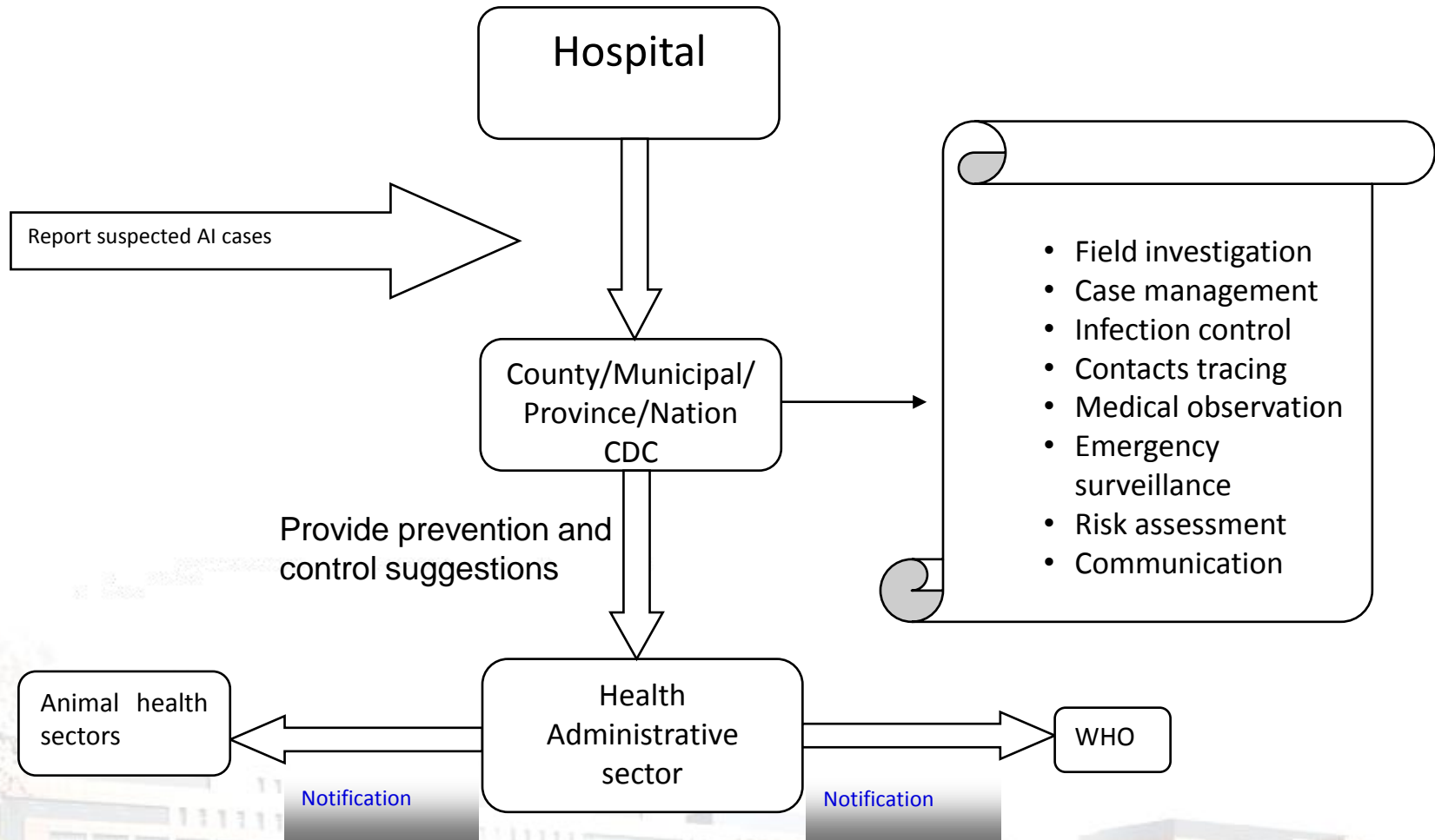


Laboratory identification procedure of novel influenza virus





Response procedure of human infection with novel influenza virus





Epidemiology Investigation

- Organization and Implementation
 - Conducted by local CDC within 2h
- Composition of investigation team
 - Include epidemiology, clinic, laboratory
- Content
 - Diagnose and treatment
 - Family environment
 - Exposure history
 - Close contact
 - Trace-back investigation
 - Source of suspected animals
 - Environment

附件 1-1
人感染新亚型流感病例调查表
—临床部分

一、基本信息

1. 姓名 _____ 2. 性别 男 女

3. 出生日期 _____ 阴历 阳历 不清楚
如果不知道其生日, 请填写年龄 岁或 月 (婴幼儿)

4. 国籍 中国 其他, 请详述 _____

5. 民族 汉族 其他, 请详述 _____

6. 身高 _____cm 7. 体重 _____kg

8. 身份证号码: _____

二、发病诊疗经过

1. 发病日期: _____

2. 发病时的主要症状 (可多选): 发热 _____℃ 咳嗽 咽痛 乏力
 肌肉酸痛 其他 _____

3. 首次就诊日期: _____

4. 首次入院日期: _____

5. 入住本医院的诊断: _____

6. 诊断为人感染新亚型流感疑似病例的日期 _____

7. 诊断为人感染新亚型流感确诊病例的日期 _____

8. 呼吸困难是否出现过: 是, 首次出现的日期 _____ 否

三、既往健康信息

1. 是否有以下慢性基础疾病? 是 否 不清楚

1.1 慢性肺部疾病 是 否 不清楚
如果是, 哮喘 支气管扩张 慢性支气管炎 肺气肿
 慢性阻塞性肺疾病 阻塞性睡眠呼吸暂停综合征
 肺间质病 慢性呼吸衰竭 其他 _____

1.2 心脑血管疾病 是 否 不清楚



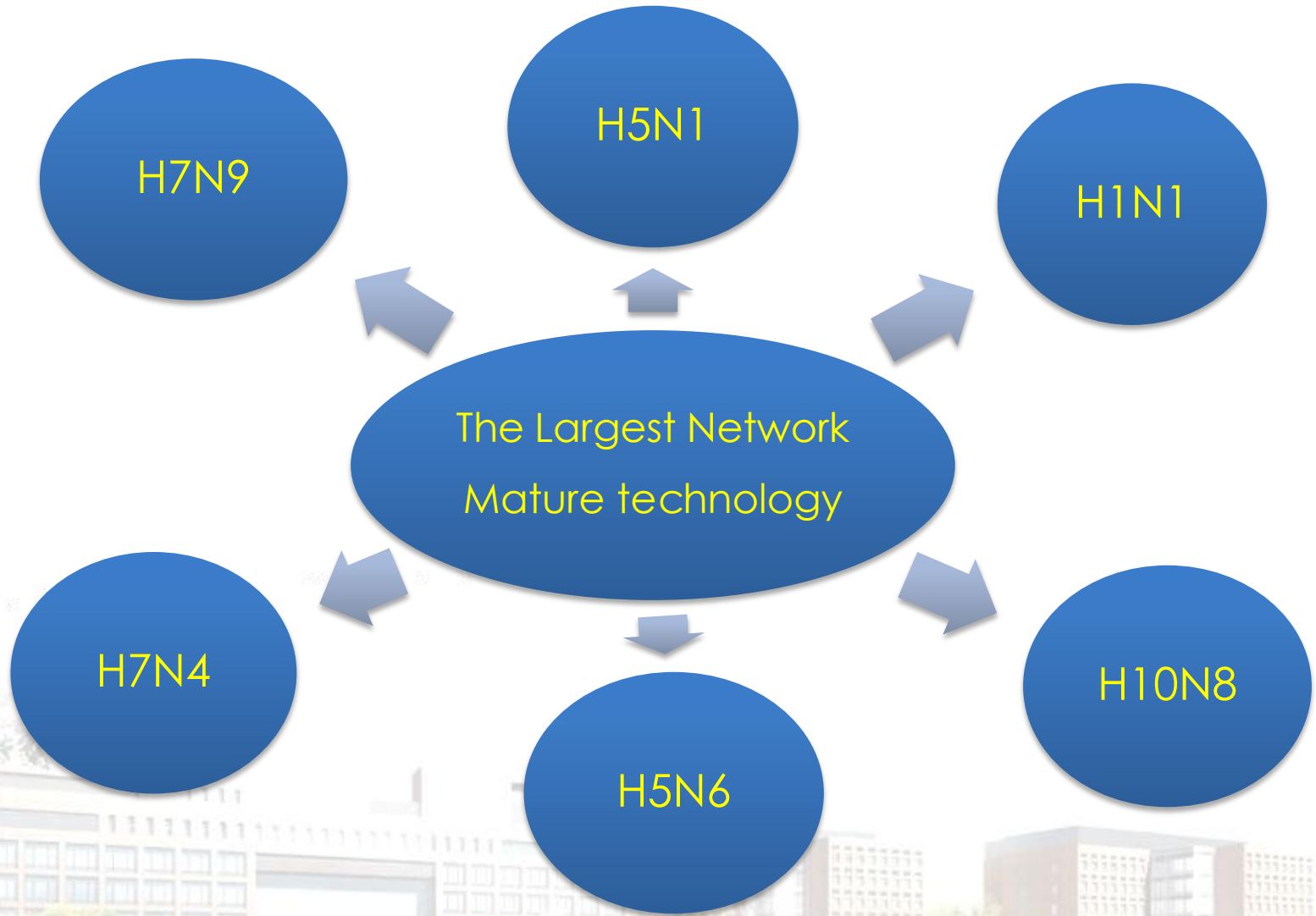
Risk Assessment

- Regular risk assessment
 - Video conference with all provinces, monthly
 - Epidemic situation analysis and information sharing, priority work for the next month
 - Including both etiology and epidemiology information
 - Important research findings that may help with the prevention and control strategies
 - Poultry infection situation if necessary
- Information exchange with animal health sector
 - Expert consensus
- Information exchange with WHO, USCDC and FAO
- Dynamic risk assessment as necessary



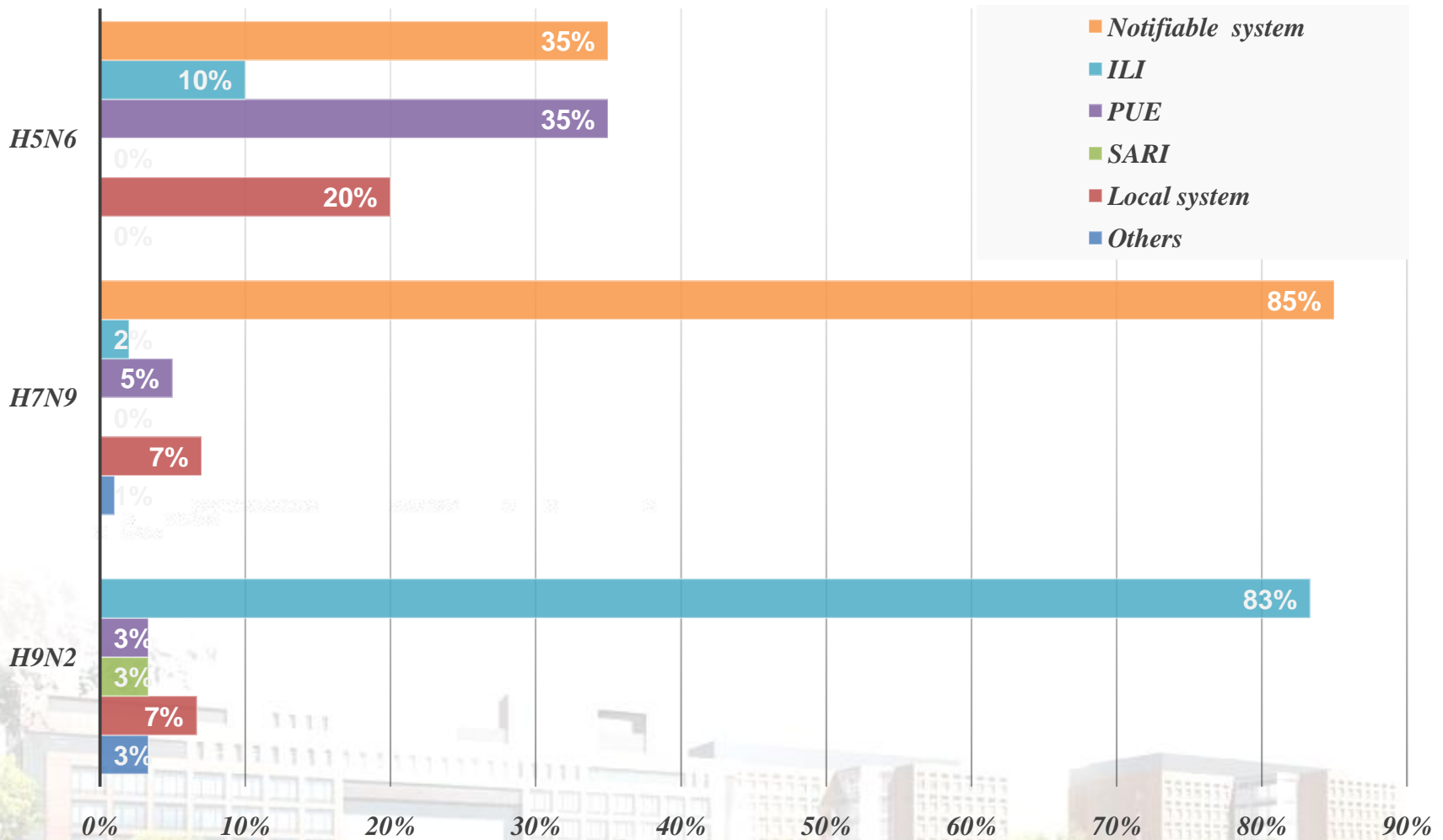


Successful Response





Proportion of source of novel influenza virus



Thank You

