

# **Influenza Surveillance in New York State 1998 - 2001**

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# **NYSDOH Influenza Surveillance**

## **Four Surveillance Systems**

- 1. Collaborating Laboratories Surveillance System**
- 2. NYSDOH Infection Control Program**
- 3. CDC Sentinel Physician Surveillance**
- 4. State Epidemiologists' Surveillance System**

# **NYSDOH Influenza Surveillance**

## **Collaborating Laboratories Surveillance System**

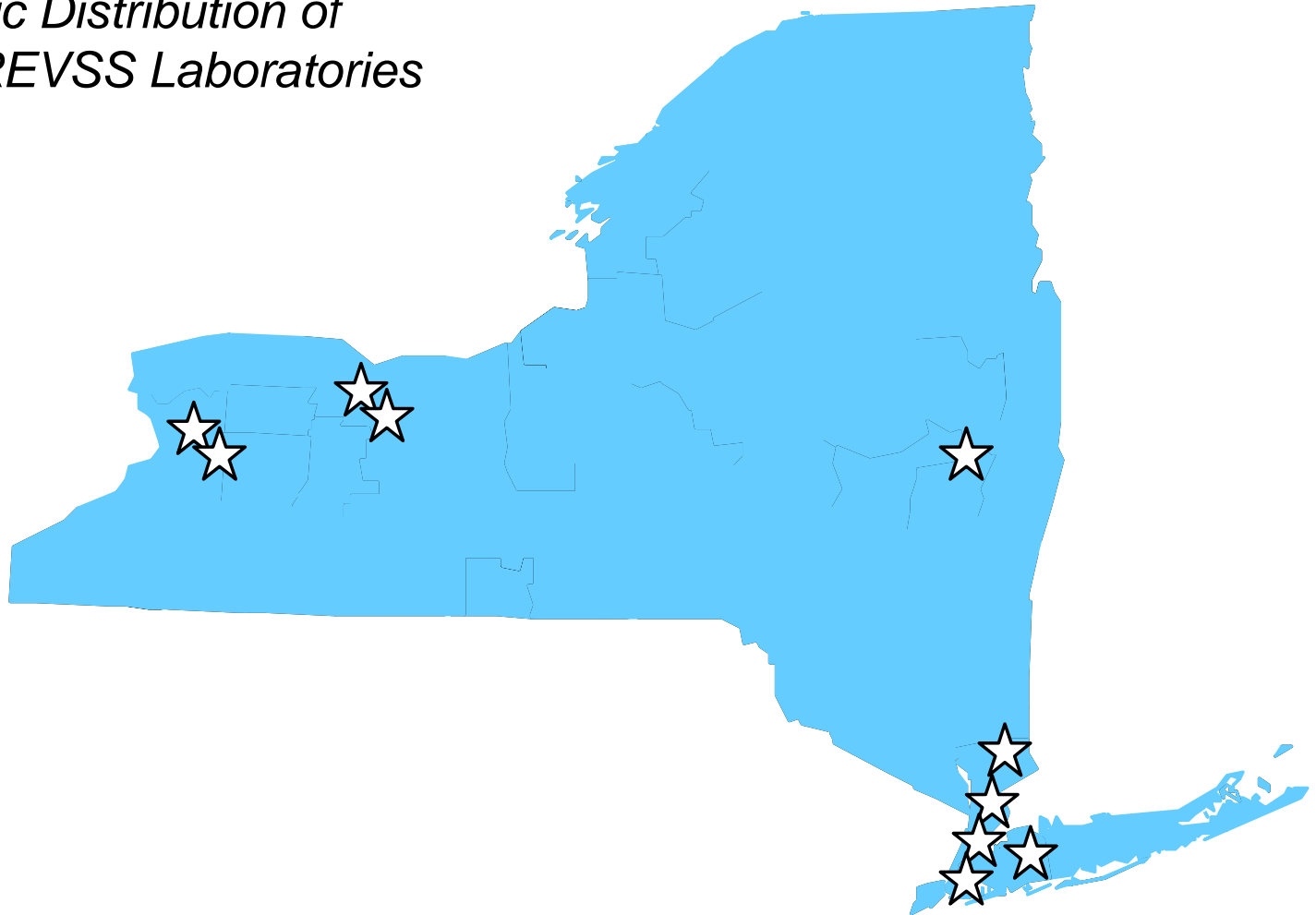
*World Health Organization Laboratories*

*National Respiratory and Enteric Virus  
Surveillance System*

- **Weekly reports to the CDC and NYSDOH**
- **Number of respiratory specimens tested**
- **Number positive for influenza**
- **By type and subtype**

# NYSDOH Influenza Surveillance Collaborating Laboratories Surveillance System

*Geographic Distribution of  
WHO / NREVSS Laboratories*



# **NYSDOH Influenza Surveillance Infection Control Program**

## *Outbreak reports*

- **Telephone consultation**
- **Laboratory support**
- **On-site assistance**

## *Outbreak surveillance*

- **Interfacility outbreaks / geographic trends**
- **Potential risks / preventive actions**

# **NYSDOH Infection Control Program**

Influenza Outbreaks vs. All Nosocomial Outbreaks  
Influenza Seasons 1998-99, 1999-00, 2000-01

<b>Report Period</b>	<b>Influenza Outbreaks</b>	<b>Total Outbreaks</b>	<b>Percentage of Outbreaks</b>
<i>October 3, 1998 - May 22, 1999</i>	<b>178</b>	<b>648</b>	<b>27%</b>
<i>October 2, 1999 - May 20, 2000</i>	<b>206</b>	<b>527</b>	<b>39%</b>
<i>September 30, 2000 - May 19, 2001</i>	<b>31</b>	<b>386</b>	<b>8%</b>

# **NYSDOH Influenza Surveillance**

## **Sentinel Physician Influenza Surveillance**

### *Influenza-like Illness*

**Cough OR sore throat AND fever  $\geq 100^{\circ}$  F  
in the absence of a known cause**

### *Reporting*

<b>1998:</b>	<b>7 sentinels</b>	<b>&gt; 200</b>	<b>patient visits weekly</b>
<b>1999:</b>	<b>25 sentinels</b>	<b>&gt; 1500</b>	<b>"</b>
<b>2000:</b>	<b>57 sentinels</b>	<b>&gt; 4500</b>	<b>"</b>

### *Specimen submission*

**Initiated 2001**





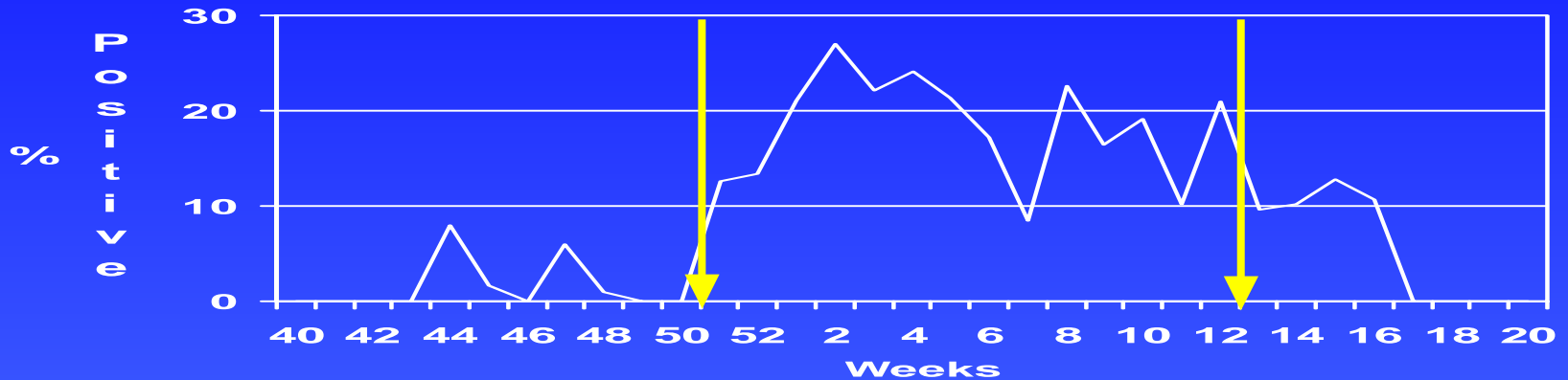
# **NYSDOH Influenza Surveillance**

## **State and Territorial Epidemiologists' Influenza Surveillance System**

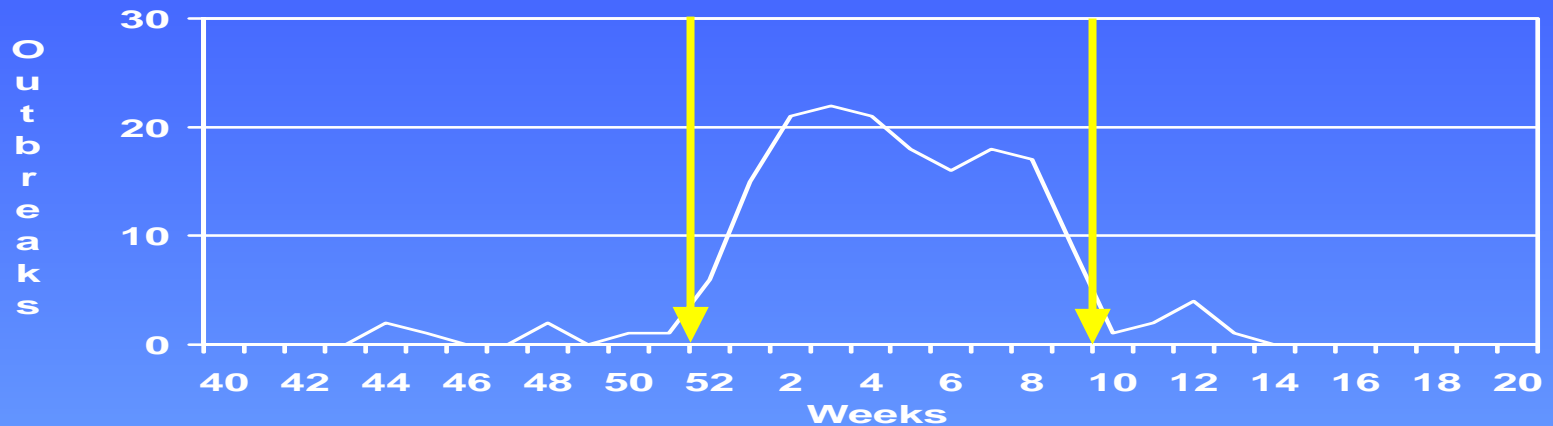
- **CDC national tracking**
- **Weekly estimates of influenza activity**
- **Categorical estimates of influenza activity**
  - ▶ **none**
  - ▶ **sporadic**
  - ▶ **regional**
  - ▶ **widespread**

# NYSDOH Influenza Surveillance 1998 - 1999

**Percent of Respiratory Specimens Positive for Influenza  
Increased Virus Isolation - 14 Weeks**

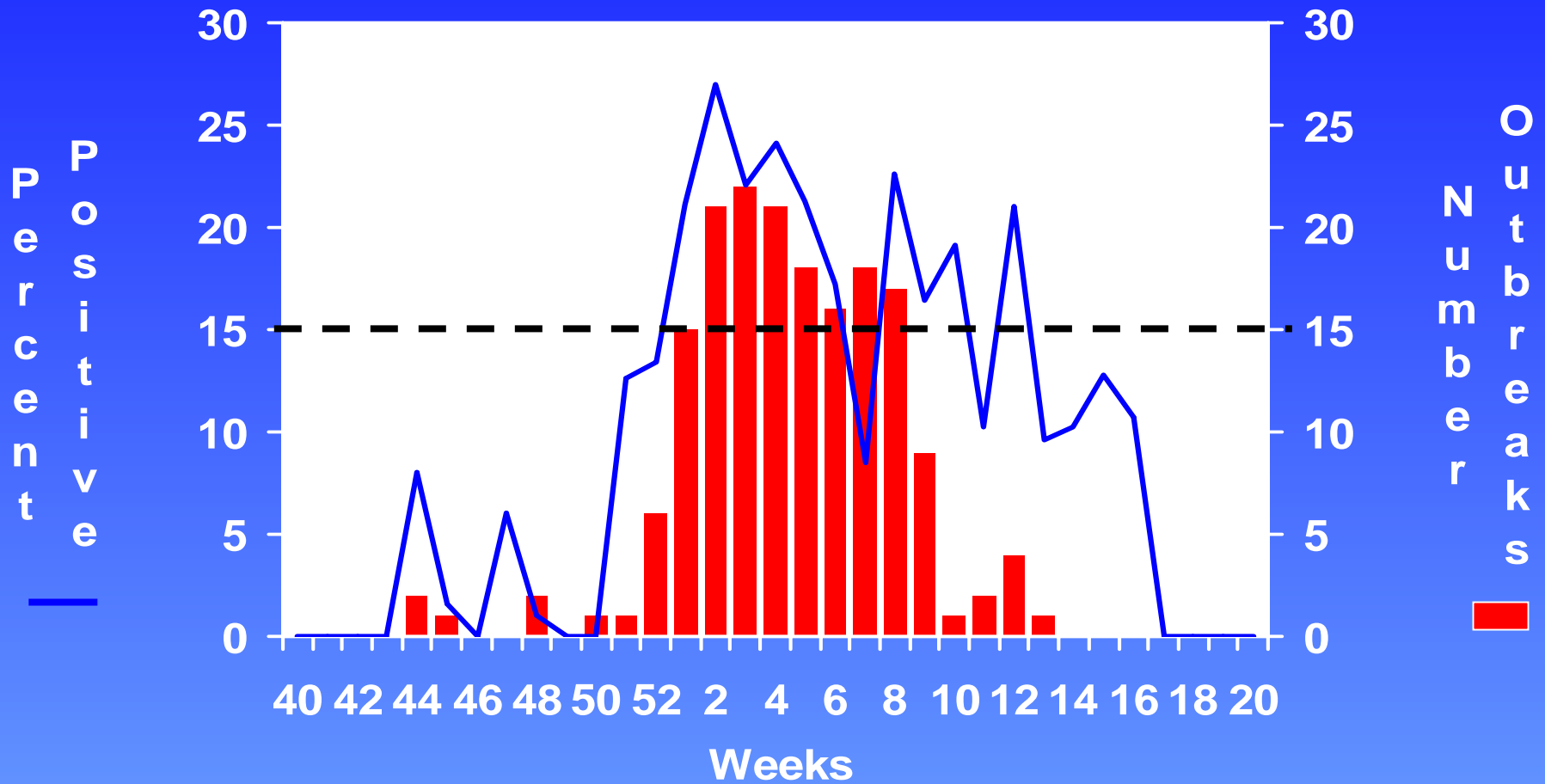


**Reported Outbreaks of Nosocomial Influenza  
Increased Outbreaks Reported - 10 Weeks**



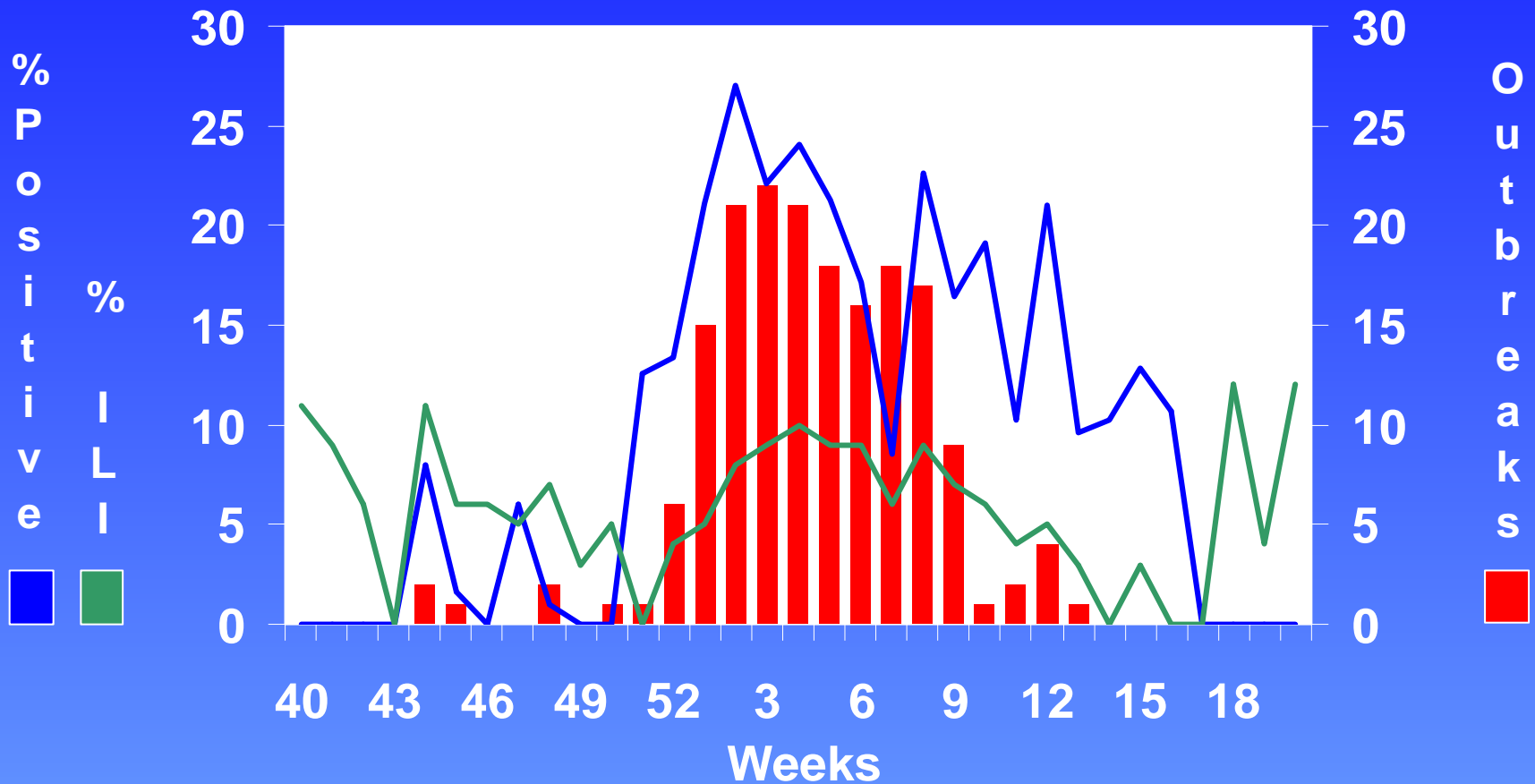
# NYSDOH Influenza Surveillance 1998 - 1999

## Percent of Respiratory Specimens Positive for Influenza Reported Outbreaks of Nosocomial Influenza



# NYSDOH Influenza Surveillance 1998 - 1999

## Percent Positive Specimens, Nosocomial Outbreaks and Percent of Patient Visits for Influenza-like Illness



# NYS NREVSS Laboratories

All Reported Respiratory Viruses

Influenza Seasons 1998-99, 1999-00, 2000-01

Weeks 20 - 40	<i>Percent of Tests Positive For</i>			
	RSV	Adenovirus	Parainfluenza	Influenza
1998 - 1999	<b>13%</b>	<b>1%</b>	<b>1%</b>	<b>13%</b>
1999 - 2000	<b>15%</b>	<b>1%</b>	<b>2%</b>	<b>10%</b>
2000 - 2001	<b>18%</b>	<b>2%</b>	<b>2%</b>	<b>7%</b>

# **NYSDOH Influenza Surveillance**

## **Prevention, Surveillance, Outbreak Control**

### *Annual Prevention and Control Guidelines*

- **ACIP recommendations**
- **Vaccine supply, indications, prioritization**
- **Website addresses for biweekly updates**

### *Biannual Influenza Alerts*

- **At season onset**
- **As season intensifies**
- **Reiterates pertinent recommendations**

# **NYSDOH Influenza Surveillance**

## **Prevention, Surveillance, Outbreak Control**

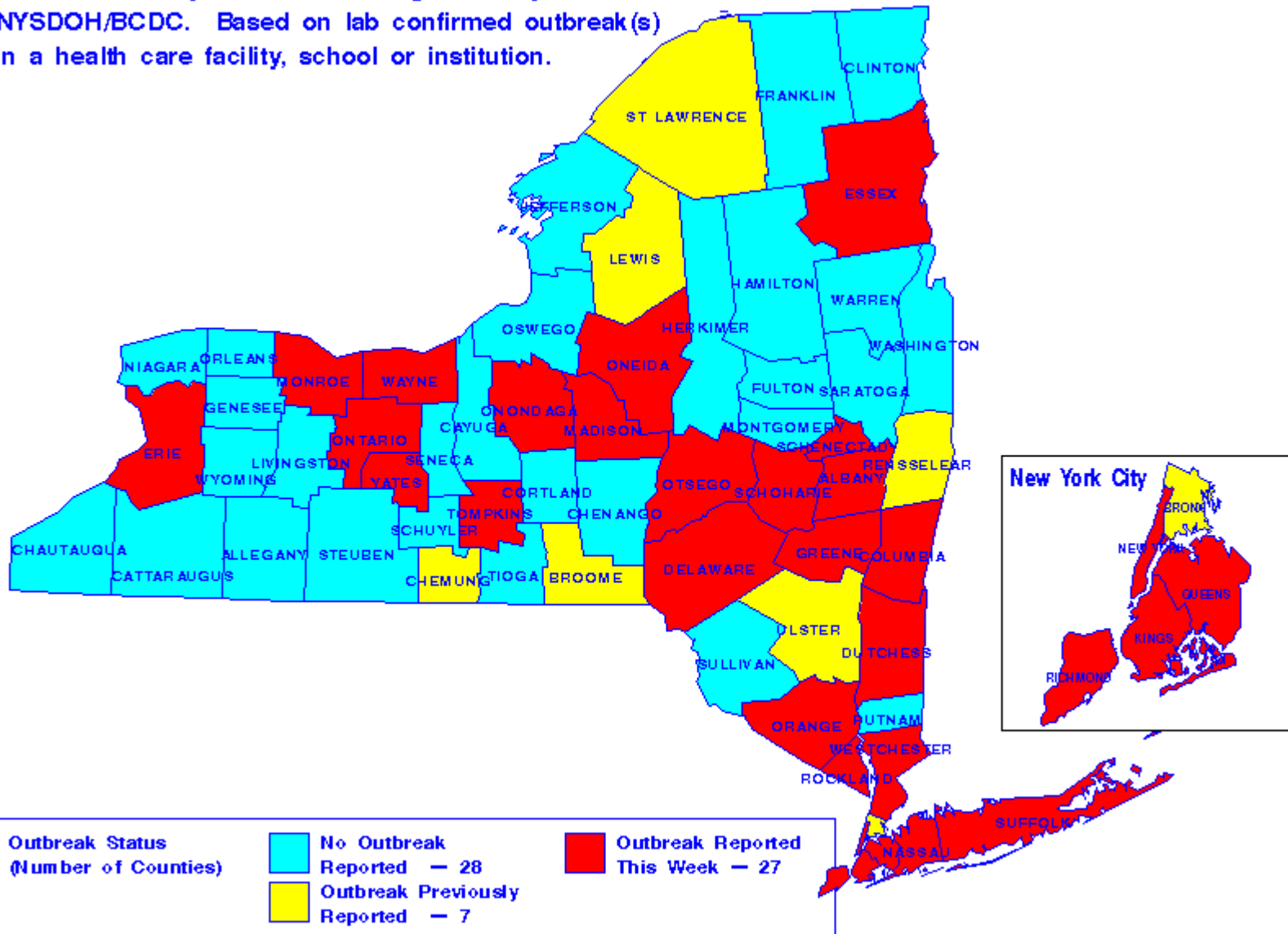
### *Outbreak Reporting*

- Identify viral agent
- Direct control measures
- Recommend appropriate prophylaxis

### *Feedback and Information*

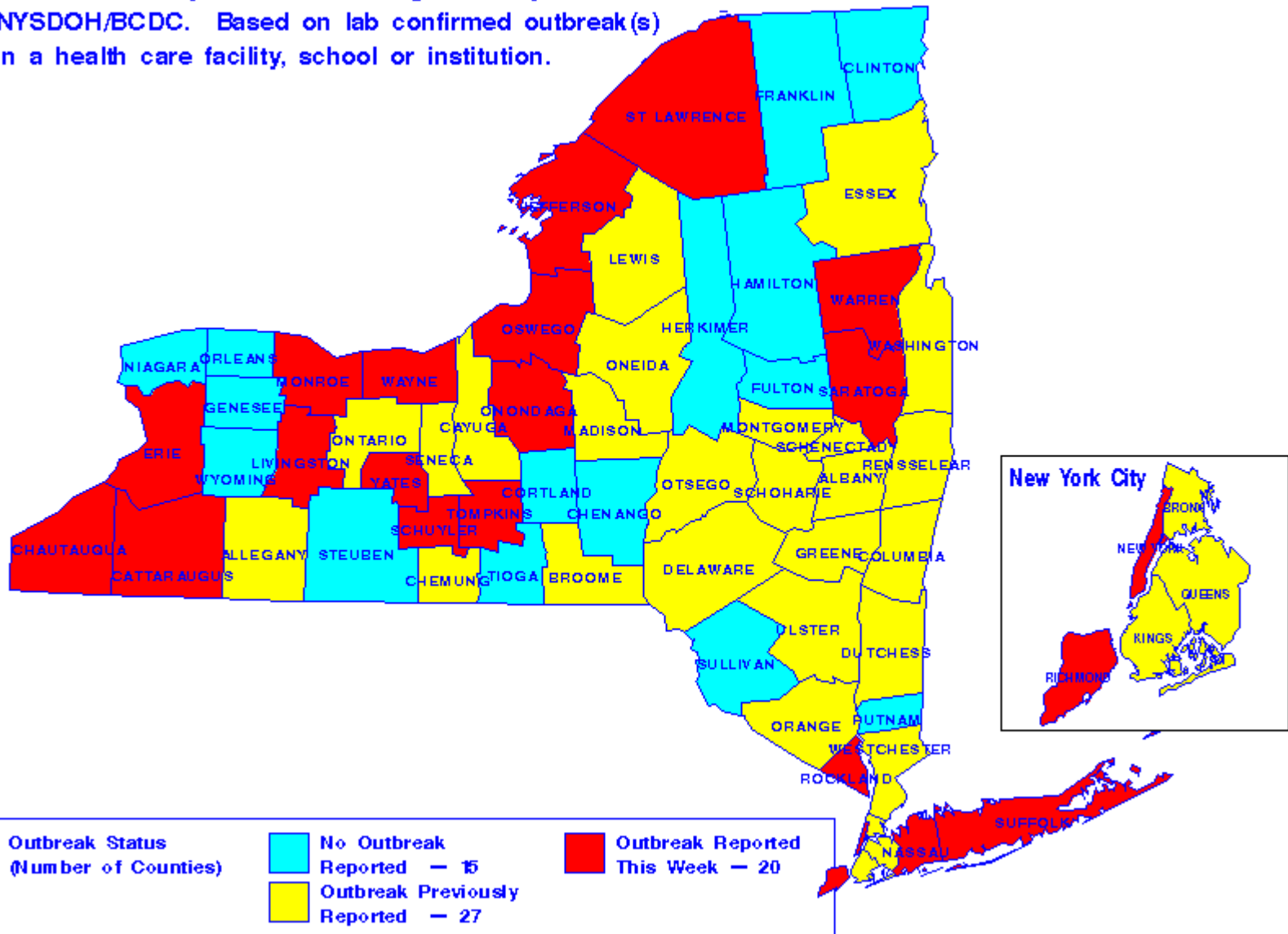
- Health Information Network
- Health Providers Network
- NYSDOH Public Website

Influenza Activity For Week Ending February 9, 2002  
 NYSDOH/BCDC. Based on lab confirmed outbreak(s)  
 in a health care facility, school or institution.





Influenza Activity For Week Ending February 23, 2002  
 NYSDOH/BCDC. Based on lab confirmed outbreak(s)  
 in a health care facility, school or institution.



# **NYSDOH Influenza Surveillance**

## **1998-99, 1999-00, 2000-01 Summary**

### *Onset of Increased Influenza Activity*

- **$\geq 10\%$  of respiratory specimens positive**
- **$\geq 5$  nosocomial outbreaks per week**
- **$\geq 3\%$  of patient visits for ILI**

### *Peak Influenza Activity*

- **$\geq 15\%$  of respiratory specimens positive**
- **Doubling of nosocomial outbreaks**
- **3% - 10% of patient visits for ILI**

# **NYSDOH Influenza Surveillance**

**1998-99, 1999-00, 2000-01 Summary**

## *Duration of Increased Influenza Activity*

- **Lab Surveillance**                      **10 - 14 weeks**
- **Nosocomial Outbreaks**            **8 - 10 weeks**
- **Sentinel Physicians**                **Less distinct**

## *Complementary Surveillance Systems in use in NYS*

## *Categorical Assessment of Influenza Activity provided to the CDC*

**New York State Department of Health  
Bureau of Communicable Disease Control**

**Influenza Surveillance**

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