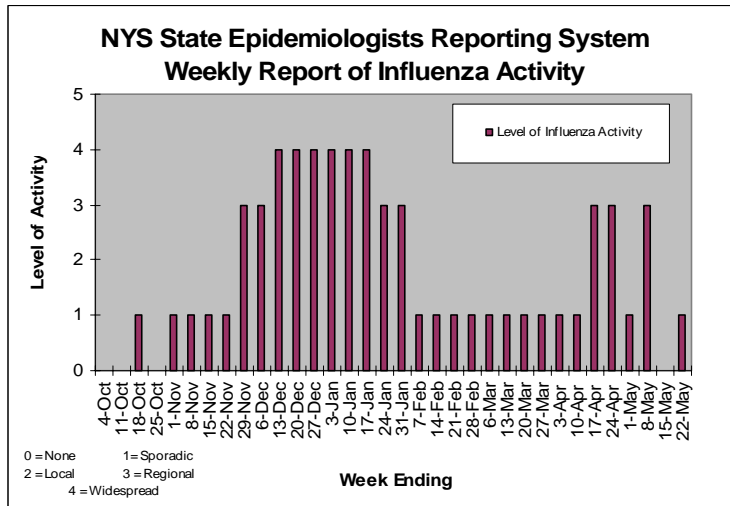


# Statewide Summary 2003-2004 Influenza Season

## New York State Department of Health Bureau of Communicable Disease Control Regional Epidemiology and Infection Control Program

### 1. Weekly New York State Epidemiologist's Report To CDC:



#### Definition of Influenza Activity Levels:

Activity Level	ILI <sup>1</sup> activity/Outbreaks		Laboratory data
<b>0 - No activity</b>	Low	And	No lab-confirmed <sup>2</sup> cases
<b>1 - Sporadic</b>	Not increased	And	Isolated lab-confirmed cases
	Or		
<b>2 - Local</b>	Not increased	And	Lab-confirmed outbreak in one institution <sup>3</sup>
	Or		
	Increased ILI in one region; ILI activity in other regions is not increased	And	Recent (within the past 3 weeks) lab evidence of influenza in region with increased ILI
<b>3 - Regional</b>	2 or more institutional outbreaks (ILI or lab-confirmed) in one region; ILI activity in other regions is not increased	And	Recent (within the past 3 weeks) lab evidence of influenza in region with the outbreaks; virus activity is no greater than sporadic in other regions
	Or		
<b>3 - Regional</b>	Increased ILI in $\geq$ two but less than half of the regions	And	Recent (within the past 3 weeks) lab confirmed influenza in the affected regions
	Institutional outbreaks (ILI or lab confirmed) in $\geq$ two and less than half of the regions	And	Recent (within the past 3 weeks) lab confirmed influenza in the affected regions
<b>4 - Widespread</b>	Increased ILI and/or institutional outbreaks (ILI or lab confirmed) in at least half of the regions	And	Recent (within the past 3 weeks) lab confirmed influenza in the state.

Nationwide summary of the 2003-2004 influenza season :<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5325a1.htm>.

<sup>1</sup> ILI = influenza-like illness, defined as temperature  $\geq$  100° F with cough or sore throat in the absence of a known cause

<sup>2</sup> Lab-confirmed = positive rapid antigen test or culture

<sup>3</sup> Institution includes nursing home, hospital, prison, school, etc.

## 2. Nosocomial Influenza Reporting:

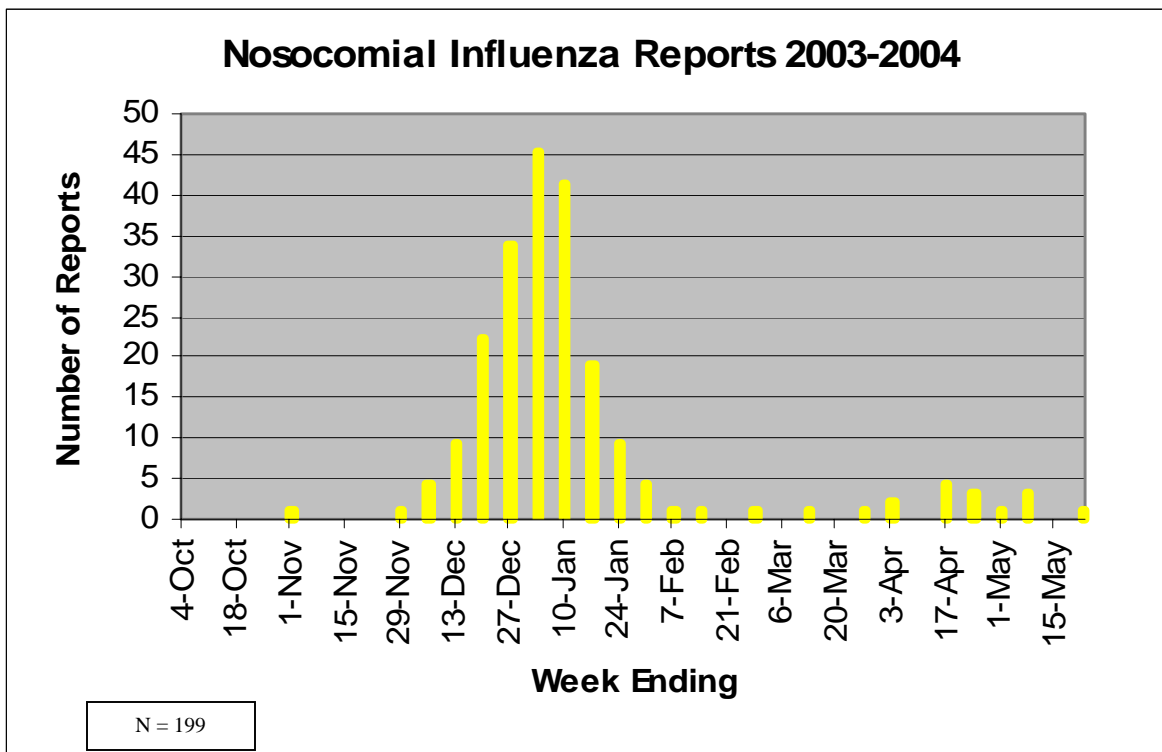
### Nosocomial Influenza Reports<sup>4</sup> Received by NYSDOH, by Week of Report, 2003-2004 Influenza Season

NYSDOH received reports of laboratory-confirmed nosocomial influenza activity as noted in the table below. Influenza type A was responsible for activity prior to late February. After February 21, the influenza type responsible for each report is indicated in parentheses.

Week Ending	Count of Nosocomial Reports Received	County of Location
May 22, 2004	none	
May 15	none	
May 8	3	New York (B), Sullivan (2 reports; flu type not tested for)
May 1	1	New York (B)
April 24	3	Bronx (A & B), Dutchess (A), Orange (A)
April 17	4	Queens, Suffolk, Westchester (2) (all B)
April 10	none	
April 3	2	New York, Westchester (both B)
March 27	1	Westchester (B)
March 20	none	
March 13	1	Richmond (B)
March 6	none	
February 28	1	Queens (B)
February 21	none	
February 14	1	Monroe
February 7	1	Richmond
January 31	4	Cattaraugus, Erie, Kings, Rockland
January 24	9	Bronx, Dutchess (2), Erie (3), Kings, Nassau, Rensselaer
January 17	18	Albany, Bronx, Broome, Delaware (2), Erie (2), Fulton, Kings, Nassau, New York (2), Oneida, Onondaga, Steuben, Suffolk (2), Westchester
January 10	39	Allegany, Bronx, Broome (2), Cattaraugus, Chautauqua, Chenango (2), Cortland, Dutchess, Erie (4), Fulton, Livingston, Monroe (2), Nassau (2), New York, Oneida (2), Onondaga (2), Queens, Rensselaer, Saratoga, Seneca, Schenectady, St. Lawrence, Steuben, Sullivan, Ulster (2), Warren, Washington, Westchester (2)
January 3	43	Albany, Chautauqua (2), Chemung, Erie (6), Jefferson, Kings (2), Monroe (5), Nassau (2), New York (2), Oneida, Onondaga (2), Orange (2), Queens (4), Rensselaer, Richmond, Saratoga (2), Schoharie, Seneca, Suffolk (3), Wayne, Westchester (2)
December 27, 2003	32	Albany (2), Bronx, Broome (3), Chemung, Chenango, Erie (2), Herkimer, Kings, Lewis, Monroe (2), Nassau, New York, Oneida, Onondaga (3), Orange, Queens, St. Lawrence, Steuben, Suffolk (3), Ulster, Washington, Wayne (2)

<sup>4</sup> facilities reporting one or more laboratory-confirmed nosocomial influenza cases

December 20	21	Broome, Erie (3), Essex, Kings, Monroe (2), Montgomery (2), New York (2), Onondaga (2), Ontario, Orange, Richmond, Schenectady (2), Suffolk, Warren
December 13	9	Bronx, Monroe (2), New York, Richmond, Rockland, St. Lawrence, Suffolk, Westchester
December 6	4	Bronx, Steuben, Suffolk, Wyoming
November 29	1	Monroe
November 22	none	
November 15	none	
November 8	none	
November 1	1	Warren
Oct 4 - October 25	none	
<b>Total</b>	<b>199</b>	<b>(5 hospitals and 194 long-term care facilities)</b>



Nosocomial Influenza Reports<sup>5</sup> Received by NYSDOH, by County, 2003-2004 Influenza Season

<b>County/Region</b>	<b>Reports Received</b>
<b><u>Capital District</u></b>	
<b><u>Region</u></b>	
Albany	4
Clinton	0
Columbia	0
Delaware	2
Essex	1
Franklin	0
Fulton	2
Greene	0
Hamilton	0
Montgomery	2
Otsego	0
Rensselaer	3
Saratoga	3
Schenectady	3
Schoharie	1
Warren	3
Washington	2
<b>Region Total Nosocomial</b>	<b>26</b>

<b>County/Region</b>	<b>Reports Received</b>
<b><u>Western Region</u></b>	
Allegany	1
Cattaraugus	2
Chautauqua	3
Chemung	2
Erie	21
Genesee	0
Livingston	1
Monroe	15
Niagara	0
Ontario	1
Orleans	0
Schuyler	0
Seneca	2
Steuben	4
Wayne	3
Wyoming	1
Yates	0
<b>Region Total Nosocomial</b>	<b>56</b>

<b><u>Syracuse Region</u></b>	
Broome	7
Cayuga	0
Chenango	3
Cortland	1
Herkimer	1
Jefferson	1
Lewis	1
Madison	0
Oneida	5
Onondaga	10
Oswego	0
St. Lawrence	3
Tioga	0
Tompkins	0
<b>Region Total Nosocomial</b>	<b>32</b>

<b><u>MARO – excluding New York City</u></b>	
Dutchess	4
Nassau	7
Orange	5
Putnam	0
Rockland	2
Suffolk	12
Sullivan	3
Ulster	3
Westchester	10
<b>Region Total Nosocomial</b>	<b>46</b>

<b><u>MARO – New York City</u></b>	
Bronx	7
Kings	7
New York	12
Queens	8
Richmond	5
<b>Region Total Nosocomial</b>	<b>39</b>

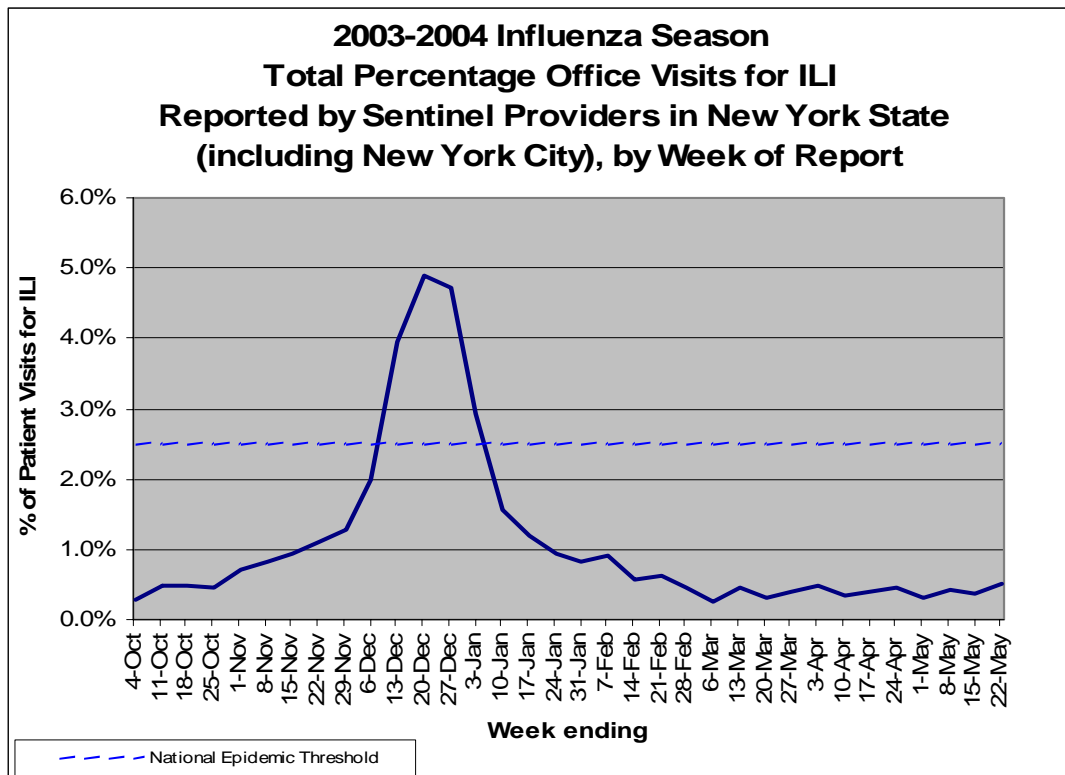
<sup>5</sup> facilities reporting one or more laboratory-confirmed nosocomial influenza cases

### 3. Sentinel Physician Surveillance:

Fifty-four (73%) of 74 New York State and New York City sentinel physicians for influenza surveillance submitted 186 respiratory specimens to the NYSDOH Wadsworth Center for testing. Of those, 82 (44%) tested positive for influenza as noted in the table below. All specimens were influenza A(H3N2). Numbers in parentheses refer to number of specimens submitted.

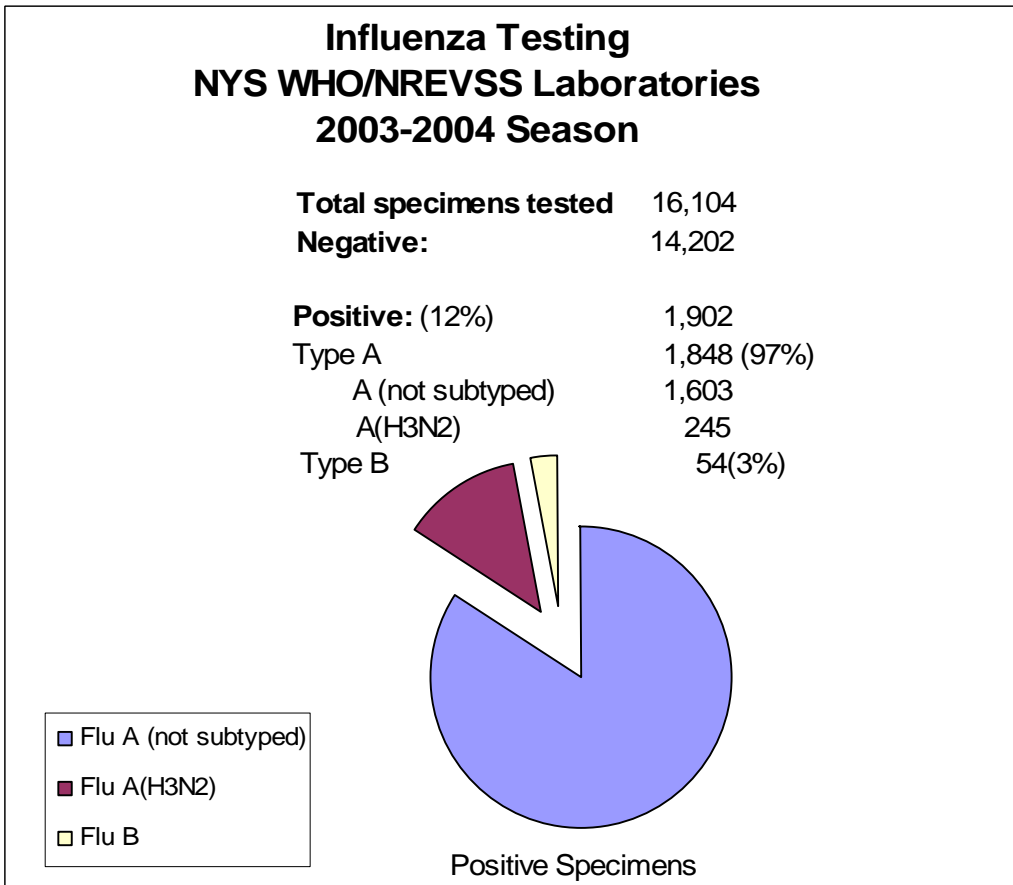
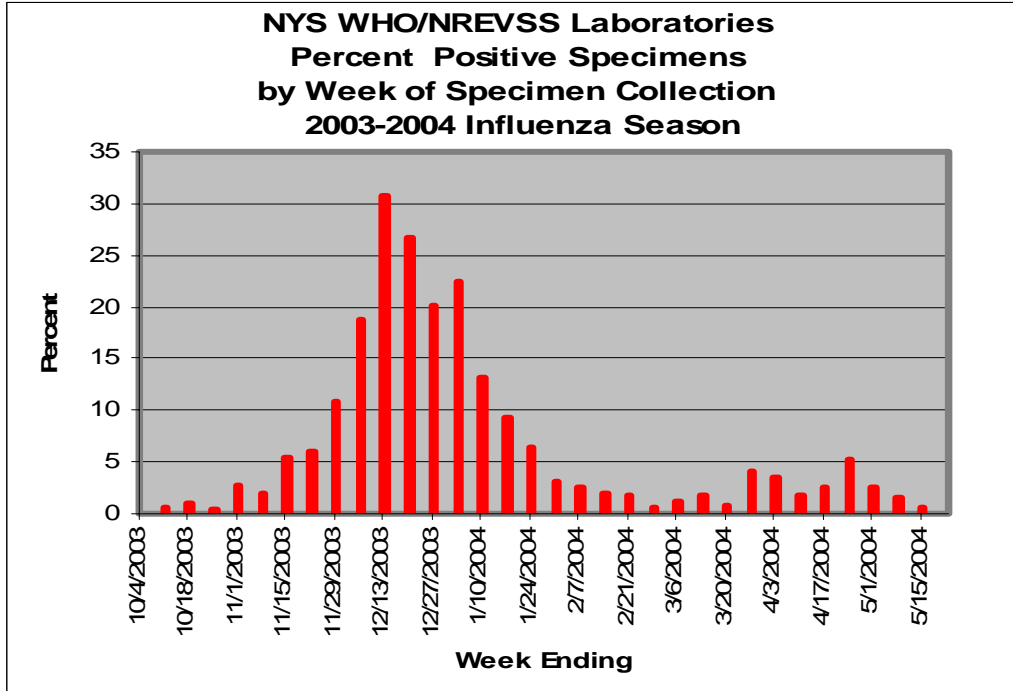
<b>Date Specimen Received by NYSDOH</b>	<b>County in which Sentinel Provider is Located</b>
02/09/04	Westchester
01/08/04	Niagara (3)
01/08/04	Tompkins
01/06/04	Rensselaer
01/05/04	Niagara
01/02/04	Westchester
12/30/03	Oneida (3)
12/24/03	Rockland
12/24/03	Westchester
12/23/03	Oneida (2)
12/22/03	Cattaraugus
12/22/03	Yates
12/19/03	Dutchess
12/19/03	Herkimer (2)
12/19/03	Kings
12/19/03	Saratoga
12/18/03	Clinton
12/18/03	Dutchess
12/18/03	Oneida
12/18/03	Rensselaer
12/17/03	Nassau
12/16/03	Putnam
12/15/03	Allegany
12/15/03	Tompkins
12/12/03	Cattaraugus (2)
12/12/03	Chautauqua
12/12/03	Otsego
12/12/03	Richmond
12/12/03	Westchester (2)
12/11/03	Cortland (2)
12/11/03	Delaware
12/11/03	Essex (2)
12/10/03	Allegany (2)
12/10/03	St. Lawrence (2)
12/9/03	Essex (3)
12/9/03	Ontario (3)
12/9/03	Saratoga (2)
12/8/03	Chautauqua
12/5/03	Columbia
12/5/03	Cortland
12/5/03	Madison
12/5/03	Ontario

12/5/03	Tompkins (2)
12/4/03	Erie (2)
12/4/03	Rensselaer
12/4/03	Richmond
12/3/03	Essex
12/3/03	Tompkins (2)
12/2/03	Broome
12/2/03	Queens
12/2/03	Tompkins
12/1/03	Saratoga (2)
11/20/03	Queens
11/14/03	Erie
11/14/03	Madison
11/14/03	Schoharie
11/6/03	Kings
11/6/03	Richmond
10/30/03	Kings (2)
10/29/03	Tompkins



Additional information regarding the New York State Sentinel Physician Influenza Surveillance Program is available at: <http://www.health.state.ny.us/nysdoh/flu/recruit.htm>

4. WHO<sup>6</sup> / NREVSS<sup>7</sup> Laboratory Reporting:



<sup>6</sup> World Health Organization collaborating laboratory for influenza virus surveillance

<sup>7</sup> National Respiratory and Enteric Virus Surveillance System collaborating laboratory

## Strain Characterization of Influenza Viruses in New York State, 2003-2004 Influenza Season

Nationally, of 949 influenza A(H3N2) virus isolates that were characterized by CDC, 11.2% were similar antigenically to the vaccine strain A/Panama/2007/99 (H3N2), and 88.8% were similar to the drift variant, A/Fujian/411/2002 (H3N2).<sup>8</sup> New York State WHO laboratories located in Albany, Buffalo, New Rochelle and New York City submitted 67 influenza A(H3N2) isolates to CDC for strain characterization. Five (7%) were similar to the vaccine strain, A/Panama, and 62 (93%) were similar to the drift variant A/Fujian.

Nationally, of 71 influenza B virus isolates that were characterized by CDC, 7% were similar antigenically to the vaccine strain B/Hong Kong/330/2001, and 93% were similar to B/Sichuan/379/99.<sup>9</sup> New York State WHO laboratories located in Albany and New Rochelle submitted eighteen influenza B virus isolates to CDC for strain characterization. Two (11%) were similar to the vaccine strain, B/Hong Kong, and 16 (89%) were similar to B/Sichuan.

### Influenza Vaccine Components

2003-2004	2004-2005
A(H3N2)Moscow/10/99 (Panama/2007/99)*	A(H3N2)Fujian/411/2002 (Wyoming/3/2003)*
A(H1N1)New Caledonia/20/99	A(H1N1)New Caledonia/20/99
B/Hong Kong/330/2001 (B/Hong Kong/1434/2002)*	B/Shanghai/361/2002 (B/Jilin/20/2003)* (B/Jiangsu/10/2003)*

\*Antigenically-equivalent components used by U.S. vaccine manufacturers

### Human Avian Influenza Virus Infection

During the 2003-2004 influenza season, a human case of avian influenza A(H7N2) virus infection was detected in New York State. This strain is **not** the same as the avian flu strain (H5Ni) that has sickened people in southeast Asia. The case was a resident of Westchester County who was hospitalized for upper and lower respiratory tract illness in November 2003. Influenza A(H7N2) virus was isolated from a respiratory specimen from the patient, who recovered from his respiratory illness. Investigation by state and local health department staff was unable to determine a source of infection. No persons in contact with the case became infected with the virus.

This case represented the second confirmed case of human infection with avian influenza A(H7N2) virus reported in the United States. One previous case was reported by the Virginia Department of Health. The person was involved in culling activities, when an outbreak of H7N2 occurred among turkeys and chickens at commercial farms in Virginia during 2002. In that case, also, no person-to-person transmission of H7N2 virus was evident, and the person made a full recovery from his acute respiratory illness.<sup>10</sup>

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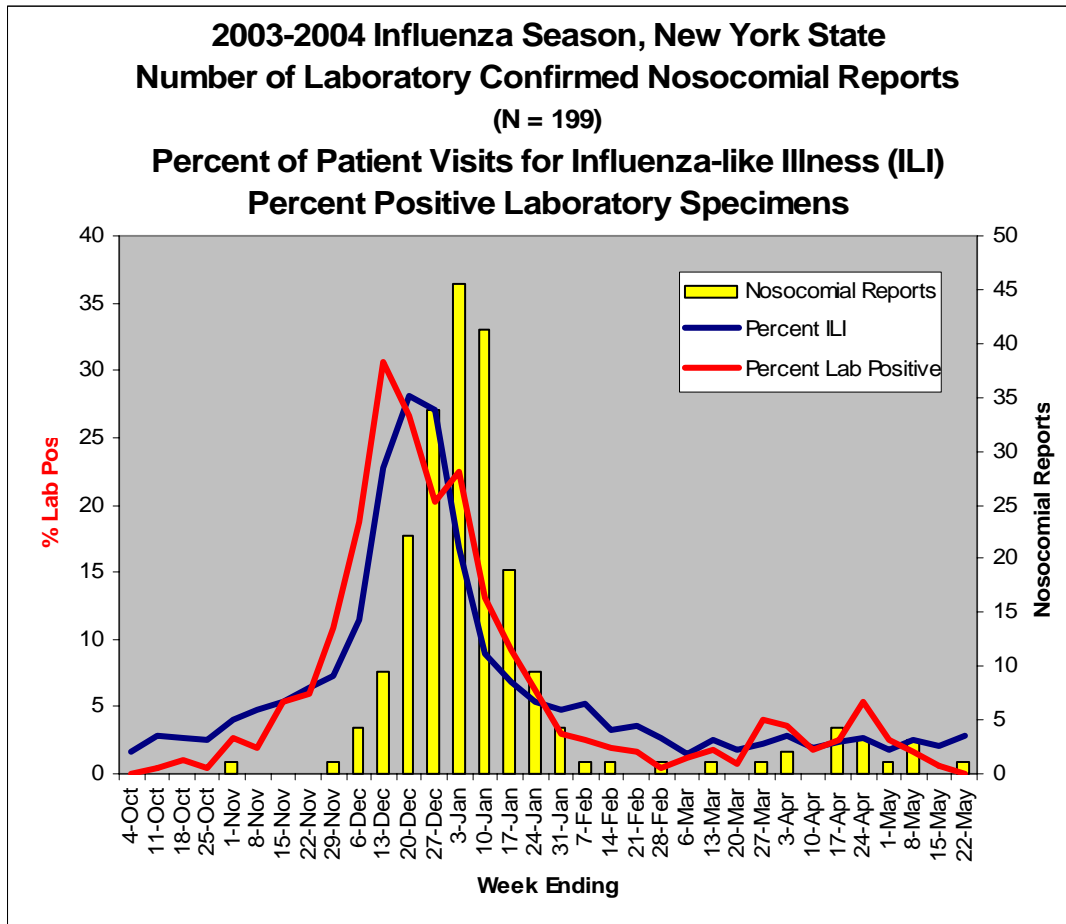
<sup>8</sup> CDC. Update: Influenza Activity --- United States and Worldwide, 2003-04 Season, and Composition of the 2004-05 Influenza Vaccine. MMWR 2004;53:547-552.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.



5. Comparison Chart\* – Three Sources Of Influenza Surveillance:



\* % ILI and nosocomial reports have been scaled to % lab positives for comparison purposes only.

**NOTE:** The influenza reporting season begins the first week in October and ends the third week in May. This report is available on NYSDOH's Influenza website at [www.health.state.ny.us/nysdoh/flu/index.htm](http://www.health.state.ny.us/nysdoh/flu/index.htm). CDC's nationwide influenza surveillance report is available at [www.cdc.gov/flu/weekly/weeklyarchives2003-2004/03-04summary.htm](http://www.cdc.gov/flu/weekly/weeklyarchives2003-2004/03-04summary.htm).

Influenza Testing Results,  
New York State W.H.O. And Nrevss Laboratories,  
Influenza Season 2003-04  
( # positive for influenza / # specimens tested ) as of July 31, 2004

Week Ending	Albany	Buffalo Lab A	Buffalo Lab B	Rochester Lab A	Rochester Lab B	New Rochelle	Bronx	Brooklyn Lab A	Brooklyn Lab B	Manhattan Lab A	Manhattan Lab B	L. I. Lab A	L. I. Lab B	Total	Percent Positive
Oct. 4, '03	0/13	0/31	0/3	0/27	0/13	0/15	0/5	0/8	0/14	0/37	0/10	0/13	0/27	0/216	0
Oct. 11	0/7	0/28	0/6	0/21	0/11	0/15	0/7	0/5	0/20	1/37	0/13	0/13	0/20	1/203	0.5
Oct. 18	0/9	0/11	0/13	0/29	0/9	0/15	1/8	0/11		1/36	0/10	0/25	0/31	2/207	1.0
Oct. 25	0/3	0/18	0/9	0/34	0/10	0/8	0/7	0/8	0/25	0/43	0/27	0/11	0/48	0/251	0
Nov. 1	0/2	0/24	0/3	0/31	0/10	0/7	0/7	0/11		0/46	0/19	0/10	0/36	0/206	0
Nov. 8	0/14	0/29	0/5	0/26	0/8	0/10	0/4	0/9	0/33	0/54	1/24	0/16	1/31	2/263	0.8
Nov. 15	0/15	0/49	0/3	0/47	0/3	2/11	0/16	0/8	1/33	4/56	0/12	1/10	2/32	10/295	3.4
Nov. 22	0/11	1/45	0/5	1/53	1/9	0/13	3/27	3/12	1/31	5/76	0/12	0/14	2/48	17/356	4.8
Nov. 29	4/14	0/47	0/6	6/45	0/6	2/20	0/23	1/19	3/38	17/139	1/10	0/15	5/59	39/441	8.8
Dec. 6	0/15	1/61	0/3	17/99	4/36	3/24	5/24	3/18	10/37	21/170	8/36	0/20	10/90	82/633	13.0
Dec. 13	1/10	28/86	1/15	76/217	11/38	4/70	7/40	6/30	8/41	40/184	12/42	0/12	47/134	241/919	26.2
Dec. 20	4/18	22/119	3/13	120/316	23/50	4/83	10/44	9/35	17/63	41/224	17/64	0/29	73/290	343/1348	25.5
Dec. 27	0/6	39/117	19/38	77/329	3/3	11/65	15/62	8/32	12/44	44/243	17/63	0/35	5/236	250/1273	19.6
Jan. 3, '04	6/29	31/141	17/52	116/350	17/34	32/146	19/64	3/19	7/45	46/163	18/73	6/58	15/273	333/1447	23.0
Jan. 10	4/38	30/141	4/31	28/258	6/32	30/140	12/53	4/19	3/26	14/177	8/60	11/48	13/331	167/1354	12.3
Jan. 17	29/56	9/97	2/26	11/136	9/42	9/67	1/38	1/29	0/17	2/118	2/47	4/36	17/161	96/870	11.0
Jan. 24	33/44	3/57	0/23	7/126	1/30	9/39	1/27	0/12	0/23	1/118	1/39	6/36	9/102	71/676	10.5
Jan. 31	43/44	3/84	1/8	3/76	3/24	0/24	0/14	2/21	0/17	1/109	1/24		2/114	59/559	10.6
Feb. 7	26/29	1/69	0/14	5/75	0/37	1/24	0/6	0/8	0/24	2/96	1/43	0/19		36/444	8.1
Feb. 14	27/33	1/76	0/13	9/108	0/51	0/22	1/12	0/23	0/18	0/92	2/23	3/26		43/497	8.7
Feb. 21	6/11	1/63	0/10	5/95	1/48	0/14	0/4	0/7	0/27	1/61	2/29	0/18		16/387	4.1
Feb. 28	25/36	0/73	0/8	0/92	0/34	0/12	0/7	0/7	1/31	1/91	0/23	0/25		27/439	6.2
Mar. 6	4/9	1/65	0/10	0/69	1/52	0/8	0/7		0/28	0/65	1/12	1/24		8/349	2.3
Mar. 13	2/12	0/56	0/5	1/72	0/20	0/13	0/13	1/14	2/25	1/74	0/21	1/14		7/339	2.1
Mar. 20	0/4	1/52	0/3	1/45	0/19	0/12	0/6	0/15	0/29	0/71	0/25	0/19		2/300	0.7
Mar. 27	0/2	0/54	0/8	0/26	0/10	8/15	0/10	0/10	0/28	1/71		0/16		9/250	3.6
Apr. 3	0/2	0/45	0/5	0/49	0/28	4/21	1/5		1/24	2/67		0/12		8/258	3.1
Apr. 10	0/2	0/40	0/6	1/39	0/22	1/7	0/6	1/11	1/18	0/57	0/21	0/16		4/245	1.6
Apr. 17	0/6	0/40	0/2	0/49	0/30	2/17	1/4	2/14	1/22	0/35		0/17		6/236	2.5
Apr. 24	0/4	0/39	0/7	0/33	0/19	8/15	1/10	0/12	0/12	1/41	0/13	0/11		10/216	4.6
May 1	2/4	0/15	0/5	0/19	0/24	0/20	1/8	1/7	1/12	2/44	0/22	0/10		7/190	3.7
May 8	0/6	0/23	0/2	0/26	0/15	1/19	0/2	0/3	1/20	0/53	0/26	0/13		2/208	1.0
May 15	0/8	0/12	0/3	0/30	0/4	0/11	0/5	0/4	0/17	0/46	0/30	0/20		0/190	0.0
May 22	0/3	0/23	0/6		0/7	0/7	0/4	0/2	0/12		0/18	0/16		0/98	0.0