



## DEPARTMENT OF HEALTH SERVICES DIVISION OF PUBLIC HEALTH

**Weekly Surveillance Report  
For the Week Ending March 06, 2010 (week 10-09)**



### AT A GLANCE

- Predominant respiratory viruses in Wisconsin:  
RSV, Human metapneumovirus, and Rhinovirus with sporadic 2009/H1N1

- Influenza-like illness activity in Wisconsin and five public health regions:

|                     | Current Week 10-09 | Previous Week 10-08 |
|---------------------|--------------------|---------------------|
| Wisconsin           | Low                | Low                 |
| Northeastern Region | Low                | Low                 |
| Northern Region     | Low                | Low                 |
| Southeastern Region | Low                | Low                 |
| Southern Region     | Low                | Low                 |
| Western Region      | Low                | Low                 |

- Influenza-like illness percentage:

|                               | Current week 10-09 | Baseline |
|-------------------------------|--------------------|----------|
| United States                 | 1.9%               | 2.3%     |
| Wisconsin                     | 0.6%               | 1.4%     |
| Region V (WI, MN, IL, MI, OH) | 1.1%               | 1.7%     |

- The Predictive Value Positive (PVP) for rapid influenza tests is: Low

(PVP is the probability of disease in a patient with a positive test result)

- The Predictive Value Negative (PVN) for rapid influenza tests is: High

(PVN is the probability of not having disease when the test result is negative)

**Use of the influenza rapid test to diagnose 2009 H1N1 is discouraged**

- Antiviral resistance: (August 31 2009 –present) \* State lab counts reflect tests on Wisconsin residents

| Season/Lab |      | ADAMANTANE RESISTANCE |        |             |        |           |        |
|------------|------|-----------------------|--------|-------------|--------|-----------|--------|
|            |      | Influenza Subtype     |        | 2009 A/H1N1 |        | A/H3      |        |
|            |      | Seasonal A/H1         | Tested | Resistant   | Tested | Resistant | Tested |
| 09-10      | WSLH |                       |        |             |        |           |        |
| 09-10      | CDC  | 1                     | 0%     | 1,495       | 99.7%  | 12        | 100.0% |

| Season/Lab |           | OSELTAMIVIR RESISTANCE |           |             |           |        |           |        |           |
|------------|-----------|------------------------|-----------|-------------|-----------|--------|-----------|--------|-----------|
|            |           | Influenza Subtype      |           |             |           |        |           |        |           |
|            |           | Seasonal A/H1          |           | 2009 A/H1N1 |           | A/H3   |           | B      |           |
| Tested     | Resistant | Tested                 | Resistant | Tested      | Resistant | Tested | Resistant | Tested | Resistant |
| 09-10      | WSLH      |                        |           | 72          | 0%        |        |           |        |           |
| 09-10      | CDC       | 1                      | 100%      | 4,036       | 1.2%      | 12     | 0%        | 11     | 0%        |

| Season/Lab |           | ZANAMIVIR RESISTANCE |           |             |           |        |           |        |           |
|------------|-----------|----------------------|-----------|-------------|-----------|--------|-----------|--------|-----------|
|            |           | Influenza Subtype    |           |             |           |        |           |        |           |
|            |           | Seasonal A/H1        |           | 2009 A/H1N1 |           | A/H3   |           | B      |           |
| Tested     | Resistant | Tested               | Resistant | Tested      | Resistant | Tested | Resistant | Tested | Resistant |
| 09-10      | WSLH      |                      |           |             |           |        |           |        |           |
| 09-10      | CDC       |                      |           | 1494        | 0%        |        |           |        |           |

- Influenza-associated pediatric deaths (August 31, 2009-present)

|               | Current Week 10-09 | 2009-10 Season Total | Due to 2009 H1N1 |
|---------------|--------------------|----------------------|------------------|
| United States | 0                  | 265                  | 217              |
| Wisconsin     | 0                  | 4                    | 4                |

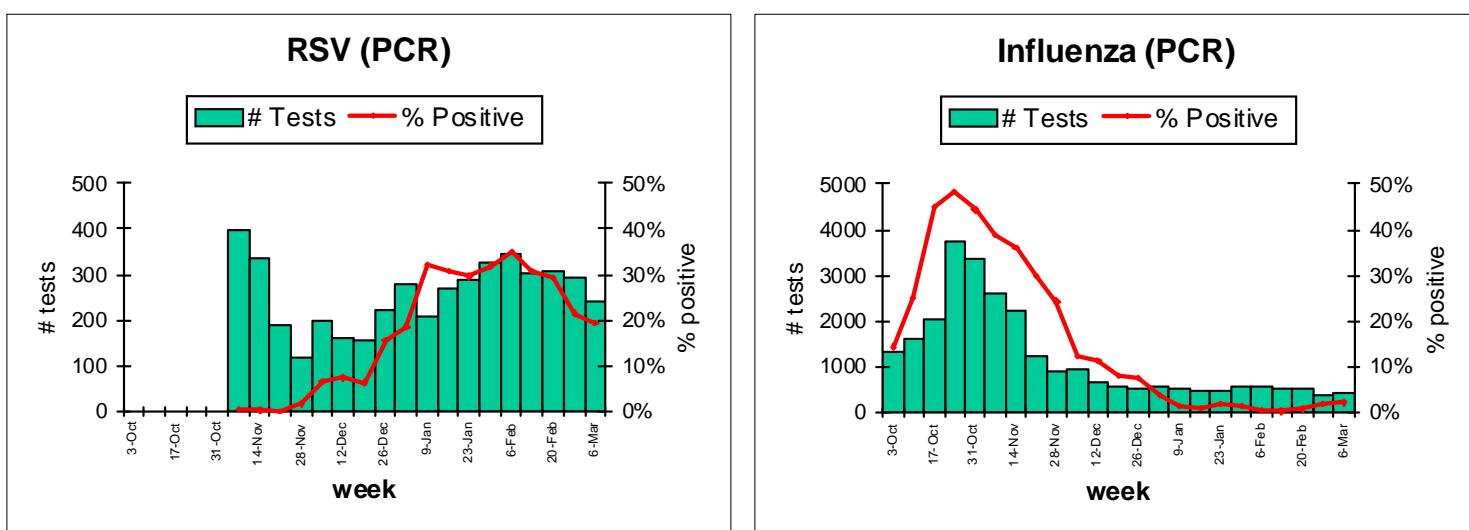
- Pneumonia and influenza mortality (P&I), United States,

|                          | Current Week 10-09 | Previous Week 10-08 |
|--------------------------|--------------------|---------------------|
| P&I %                    | 7.7%               | 7.8%                |
| National P&I threshold % | 7.9%               | 7.9%                |

# WISCONSIN LABORATORY SURVEILLANCE For Influenza and other Respiratory Viruses (week 10-09)

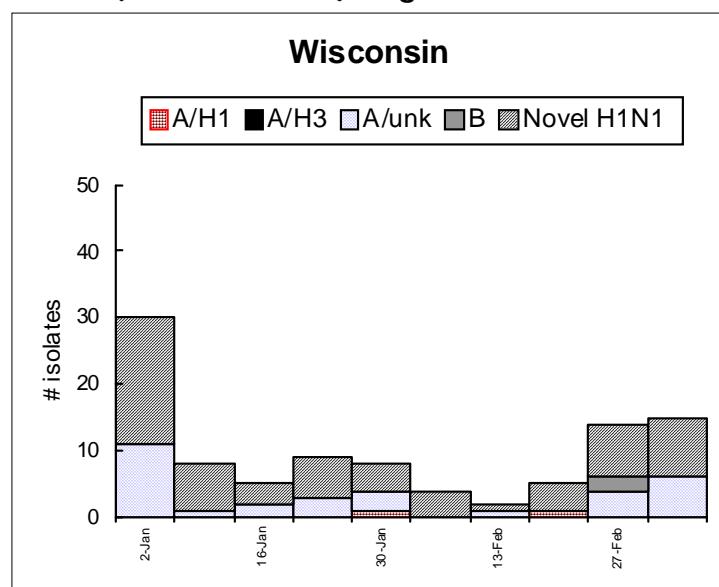
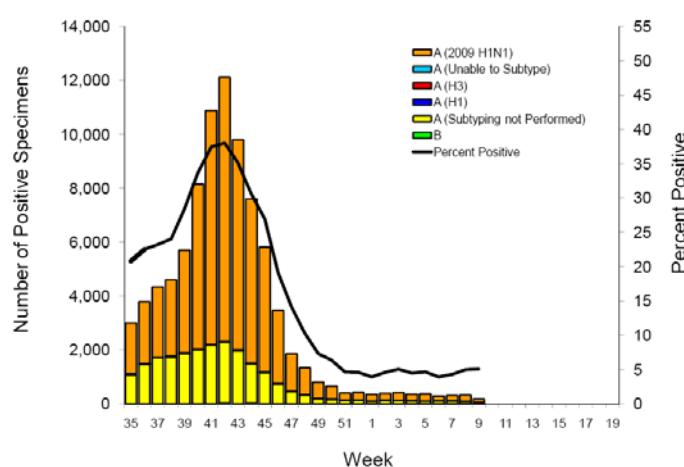
| VIRUS CULTURE<br>Based on 130 tests   |            | RAPID TESTS     |         |            | SELECT PCR TESTS |                           |
|---|------------|-----------------|---------|------------|------------------|---------------------------|
| Test Type   | % Positive | Virus           | # Tests | % Positive | Test Type        | Positive/<br>total number |
| Total % Positive  | 10.8%      |                 |         |            |                  |                           |
| Influenza (Tot.)  | 5.4%       | Influenza (Tot) | 297     | 2.4%       | Influenza A & B  | 10/439                    |
| Influenza A   | 5.4%       | Influenza A     |         | 2.4%       | Influenza A      | 0/3                       |
| Influenza B   | 0.0%       | Influenza B     |         | 0.0%       | # A/H1           | 0                         |
| hMPV  | 0.0%       | Influenza Unk.* |         | 0.0%       | 2009 A/H1        | 9                         |
| RSV   | 4.3%       | RSV             | 443     | 30.9%      | # A/H3           | 0                         |
| Adenovirus  | 0.0%       | Adenovirus      | 19      | 0.0%       | # A/not subtyped | 1                         |
| Parainfluenza   | 1.1%       |                 |         |            | # B              | 0                         |
| Rhinovirus  | 0.0%       |                 |         |            |                  |                           |
| Enterovirus   | 0.8%       |                 |         |            |                  |                           |
| hMPV  | 0.0%       |                 |         |            |                  |                           |
| * Influenza unknown (Unk) are positive influenza test results that cannot be distinguished between Type A and B |            |                 |         |            |                  |                           |

## WISCONSIN TREND. RSV AND INFLUENZA PCR POSITIVE TESTS



## WISCONSIN AND U.S. TREND INFLUENZA SUBTYPES (CULTURE/PCR) August 2009-Present

Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, August 30, 2009-March 6, 2010



**NATIONAL SUMMARY**  
**(Wisconsin is in Region 5)**

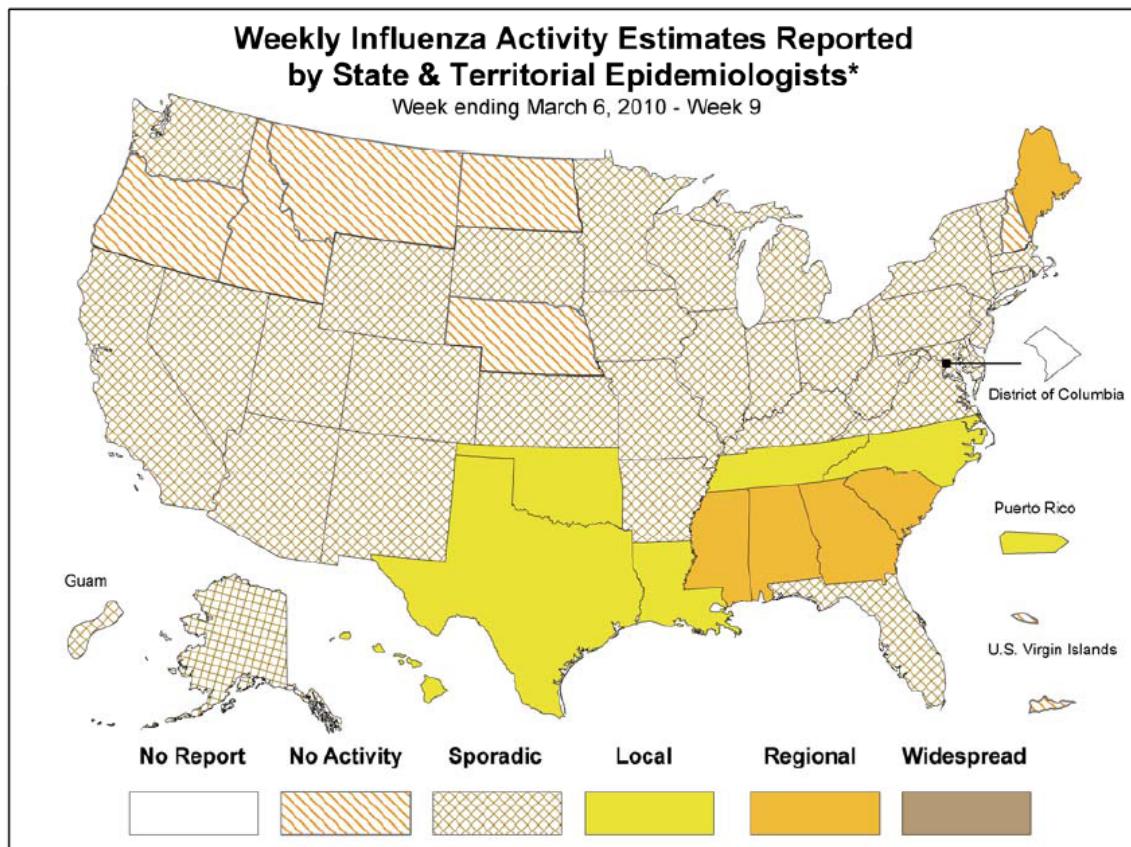
Current week 10-09

**National and Regional Summary of Select Surveillance Components**

| HHS Surveillance Regions** | Data for current week |                     |  | Data cumulative since August 30, 2009 (Week 35)* |        |               |                        |                             |     |                  |
|----------------------------|-----------------------|---------------------|--|--|--------|---------------|------------------------|-----------------------------|-----|------------------|
|                            | Out-patient ILI†      | % positive for flu‡ | Number of jurisdictions reporting regional or widespread activity§ | A (H1)   | A (H3) | 2009 A (H1N1) | A (unable to subtype)¶ | A (Subtyping not performed) | B   | Pediatric Deaths |
| <b>Nation</b>              | Normal                | 5.1%                | 5 of 54  | 34   | 62     | 65,379        | 289                    | 21,699                      | 273 | 265              |
| <b>Region 1</b>            | Normal                | 3.0%                | 1 of 6   | 4  | 4      | 3,391         | 14                     | 501                         | 11  | 6                |
| <b>Region 2</b>            | Normal                | 1.9%                | 0 of 4   | 8  | 5      | 1,777         | 0                      | 2,389                       | 12  | 18               |
| <b>Region 3</b>            | Normal                | 1.9%                | 0 of 6   | 3  | 10     | 10,670        | 48                     | 1,449                       | 18  | 14               |
| <b>Region 4</b>            | Elevated              | 15.1%               | 4 of 8   | 0  | 7      | 9,048         | 95                     | 4,477                       | 78  | 50               |
| <b>Region 5</b>            | Normal                | 3.4%                | 0 of 6   | 8  | 25     | 9,440         | 47                     | 1,574                       | 19  | 36               |
| <b>Region 6</b>            | Normal                | 4.5%                | 0 of 5   | 2  | 3      | 4,874         | 19                     | 5,303                       | 50  | 69               |
| <b>Region 7</b>            | Elevated              | 4.9%                | 0 of 4   | 3  | 1      | 3,423         | 3                      | 548                         | 9   | 8                |
| <b>Region 8</b>            | Normal                | 0.8%                | 0 of 6   | 4  | 2      | 9,830         | 0                      | 3,926                       | 56  | 16               |
| <b>Region 9</b>            | Elevated              | 1.1%                | 0 of 5   | 0  | 4      | 8,323         | 49                     | 1,208                       | 17  | 38               |
| <b>Region 10</b>           | Normal                | 0.5%                | 0 of 4   | 2  | 1      | 4,603         | 14                     | 324                         | 3   | 10               |

\*Influenza season officially begins each year at week 40. This season data from week 35 will be included to show the trend of influenza activity before the official start of the 2009-10 influenza season.

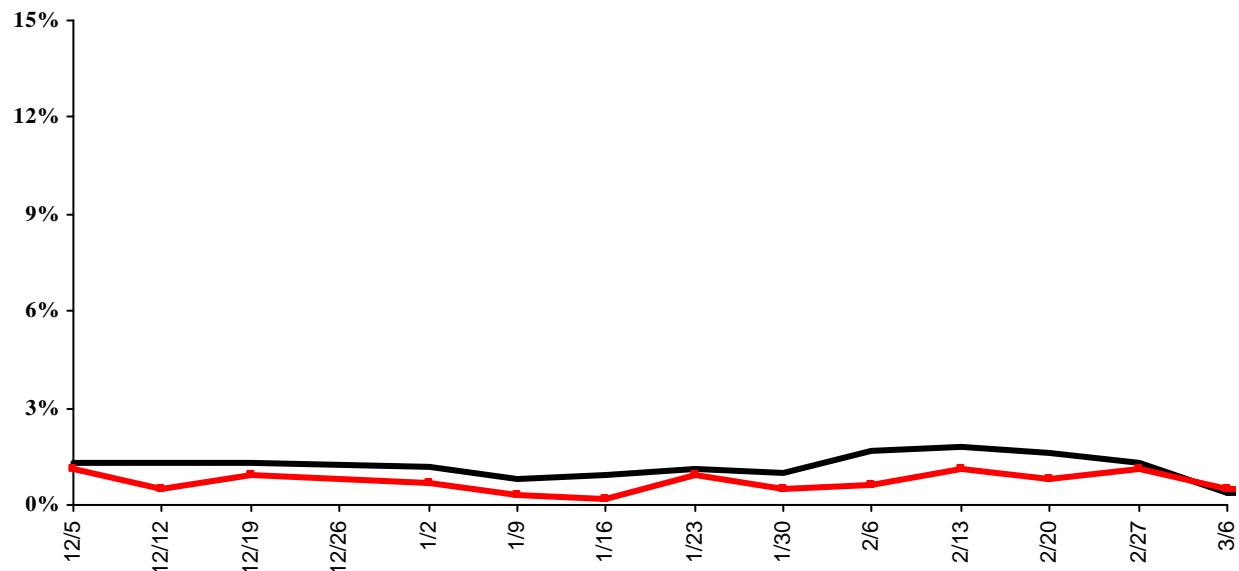
\*\*HHS regions (Region 1 CT, ME, MA, NH, RI, VT; Region 2: NJ, NY, Puerto Rico, US Virgin Islands; Region 3: DE, DC, MD, PA, VA, WV; Region 4: AL, FL, GA, KY, MS, NC, SC, TN; Region 5: IL, IN, MI, MN, OH, WI; Region 6: AR, LA, NM, OK, TX; Region 7: IA, KS, MO, NE; Region 8: CO, MT, ND, SD, UT, WY; Region 9: AZ, CA, Guam, HI, NV; and Region 10: AK, ID, OR, WA). Use of the national baseline for regional data or regional baselines for state data is not appropriate.



\* This map indicates geographic spread & does not measure the severity of influenza activity

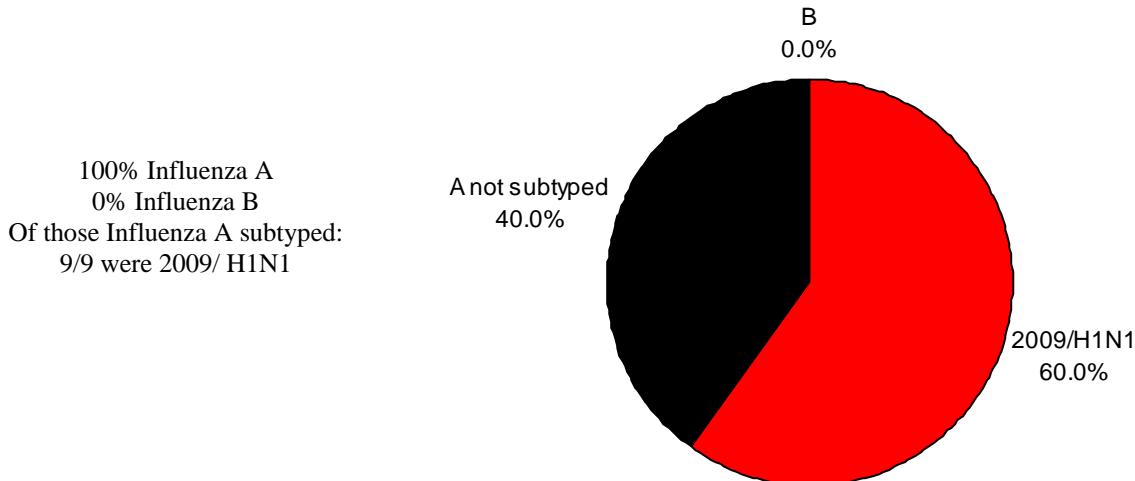
**ILI Activity Statewide**  
Family Practice Clinicians and University Student Health Clinicians  
December 5, 2009 to present

— Family Practice — University Health



**Influenza Strains Wisconsin Week 09**

■ 2009/H1N1 ■ A not subtyped □ B



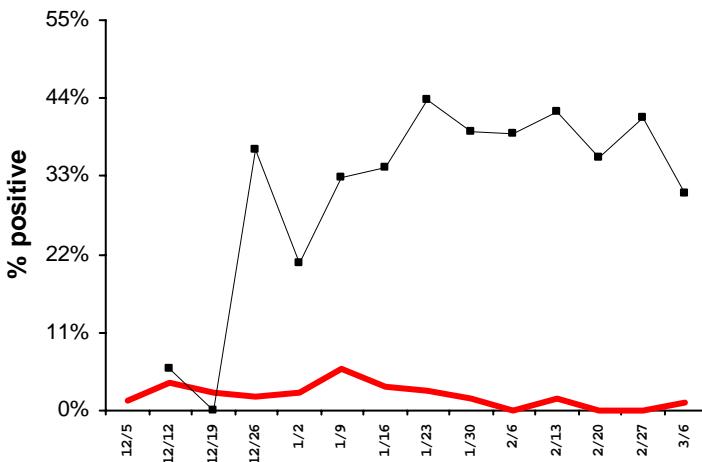
# RAPID TEST SITE DATA (CHART) BY REGION

Percent Positive Rapid Tests for Influenza and RSV

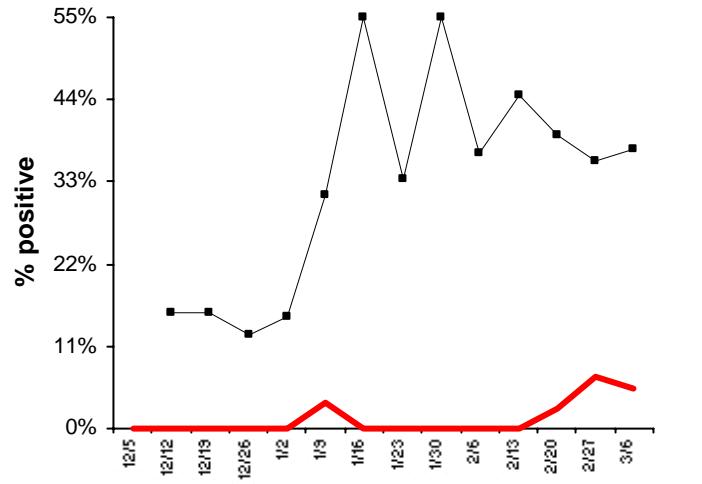
— Influenza

■ RSV

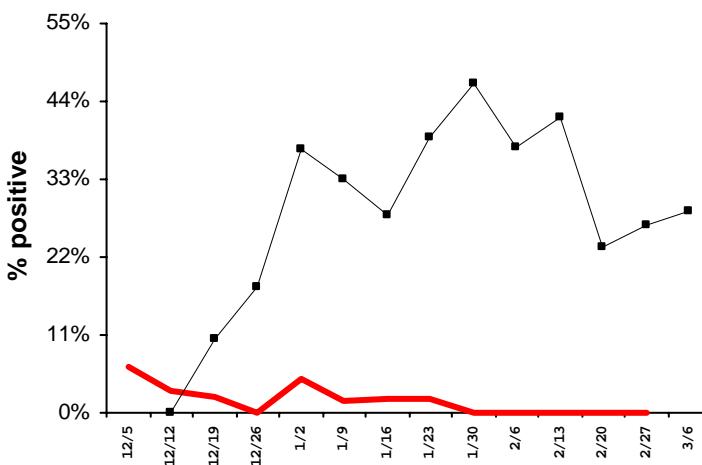
**Northeast Region**



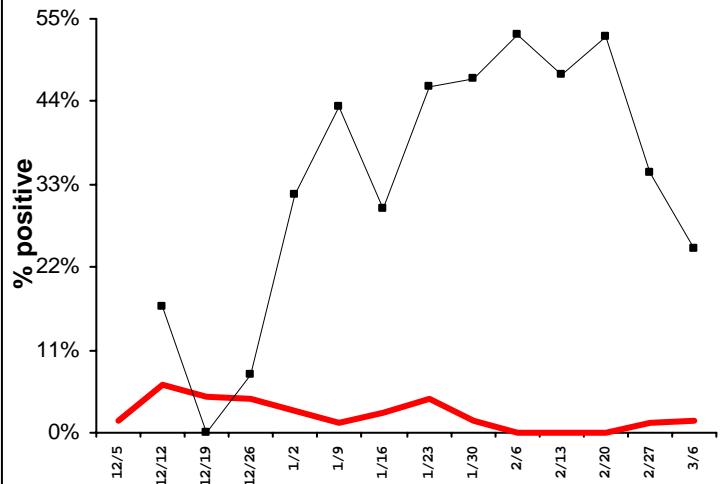
**Northern Region**



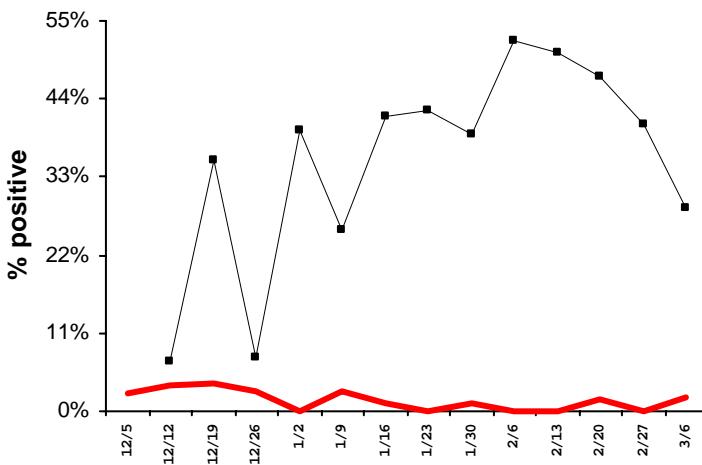
**Southeastern Region**



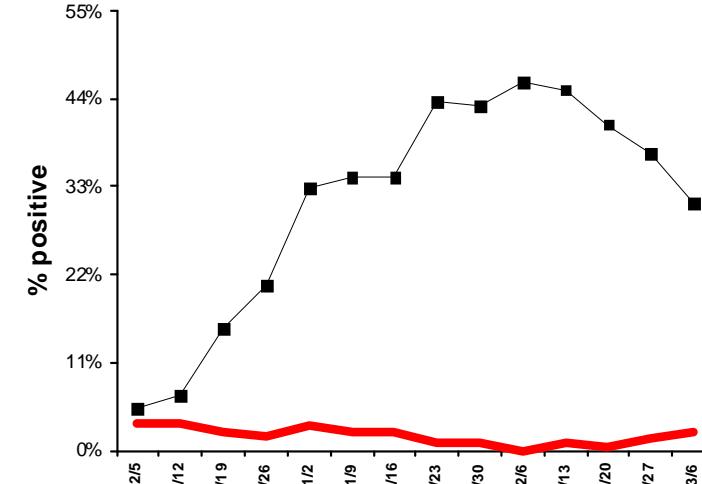
**Southern Region**



**Western Region**



**Wisconsin**



# INFLUENZA-LIKE ILLNESS DATA (CHART) BY REGION

Source: US Outpatient Influenza-like Illness Surveillance Network (ILINet)

ILI %

Baseline %

Threshold %

