



# Clark County Influenza Surveillance Update

CDC Week 2 (January 11—January 17)

*All data are preliminary and may change as more reports are received*

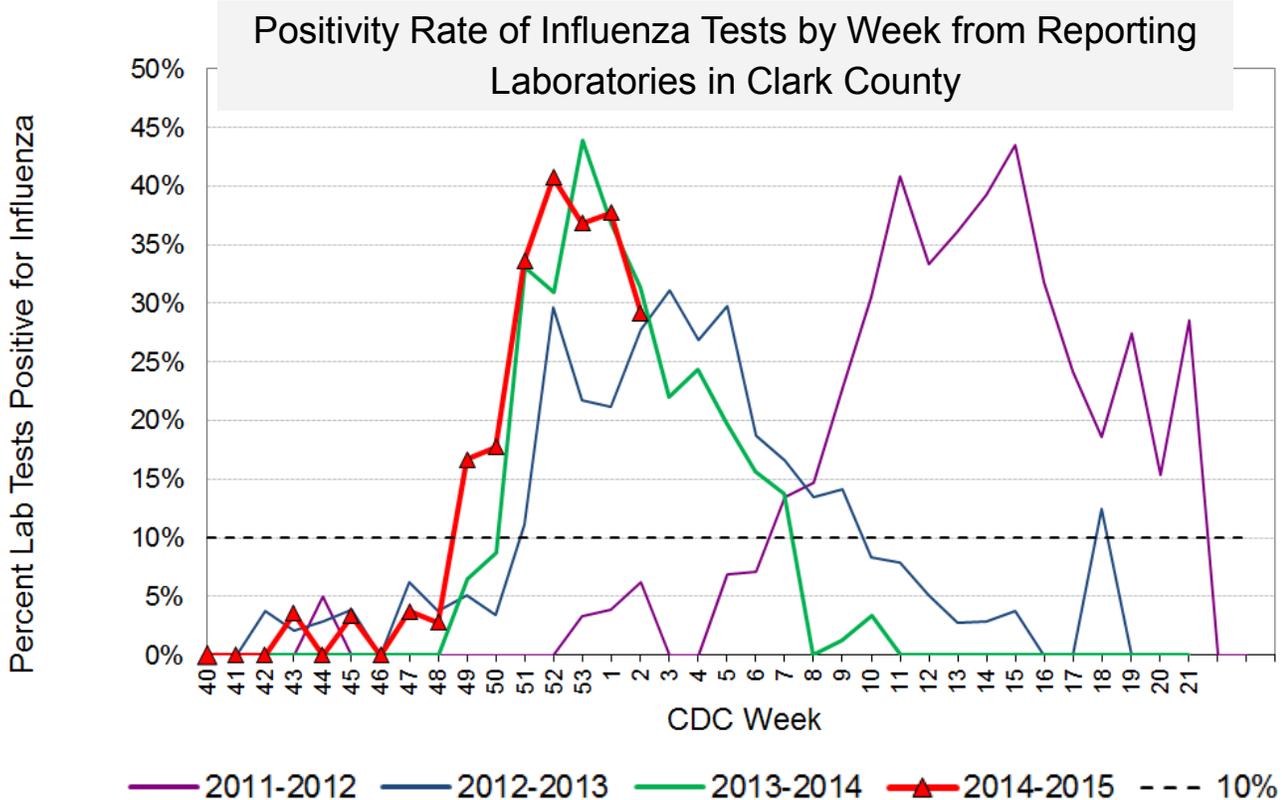
## Summary

- During Week 2 (01/11/15 – 01/17/15) influenza activity in Clark County **remained elevated**.
- Influenza activity also remained elevated in Washington State during Week 2.
- During Week 2, the proportion of outpatient visits for influenza-like illness (ILI) in Washington State was 3.9%, surpassing the state baseline of 1.1% for the seventh consecutive week.
- Nationally, 49 states report [regional or widespread influenza activity](#).

## Laboratory Data from Reporting Laboratories

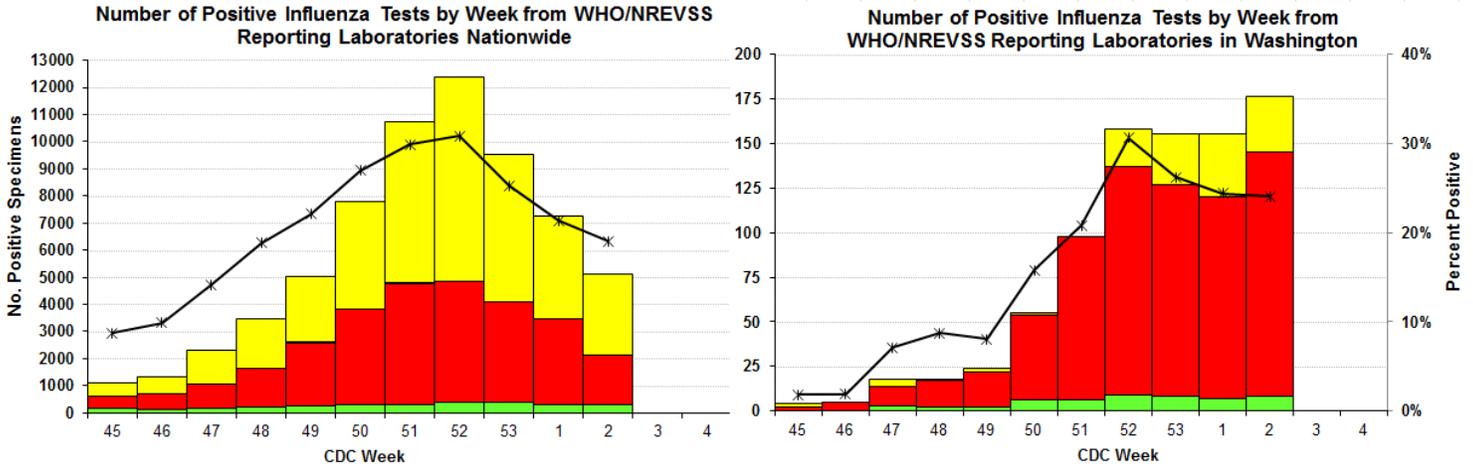
The positivity rate is the percent of influenza tests done by reporting laboratories for this influenza season that are positive. Historically, the CDC has used  $\geq 10\%$  positivity to define flu seasons for modeling studies and for calculating influenza-like-illness baselines.

2014-2015											
CDC Week	Flu Week	Date Range	A (H1)	A (2009 H1N1)	A (H3)	A (not sub-typed)	Type B	Total influenza	No. Tested	Positivity	
51	12	12/14-12/20	0	0	4	29	1	34	101	33.7%	
52	13	12/21-12/27	0	0	2	64	0	66	162	40.7%	
53	14	12/28-01/3	0	0	0	67	0	67	182	36.8%	
1	15	01/04-01/10	0	0	4	82	3	89	236	37.7%	
2	16	01/11-01/17	0	0	3	69	1	73	250	29.2%	

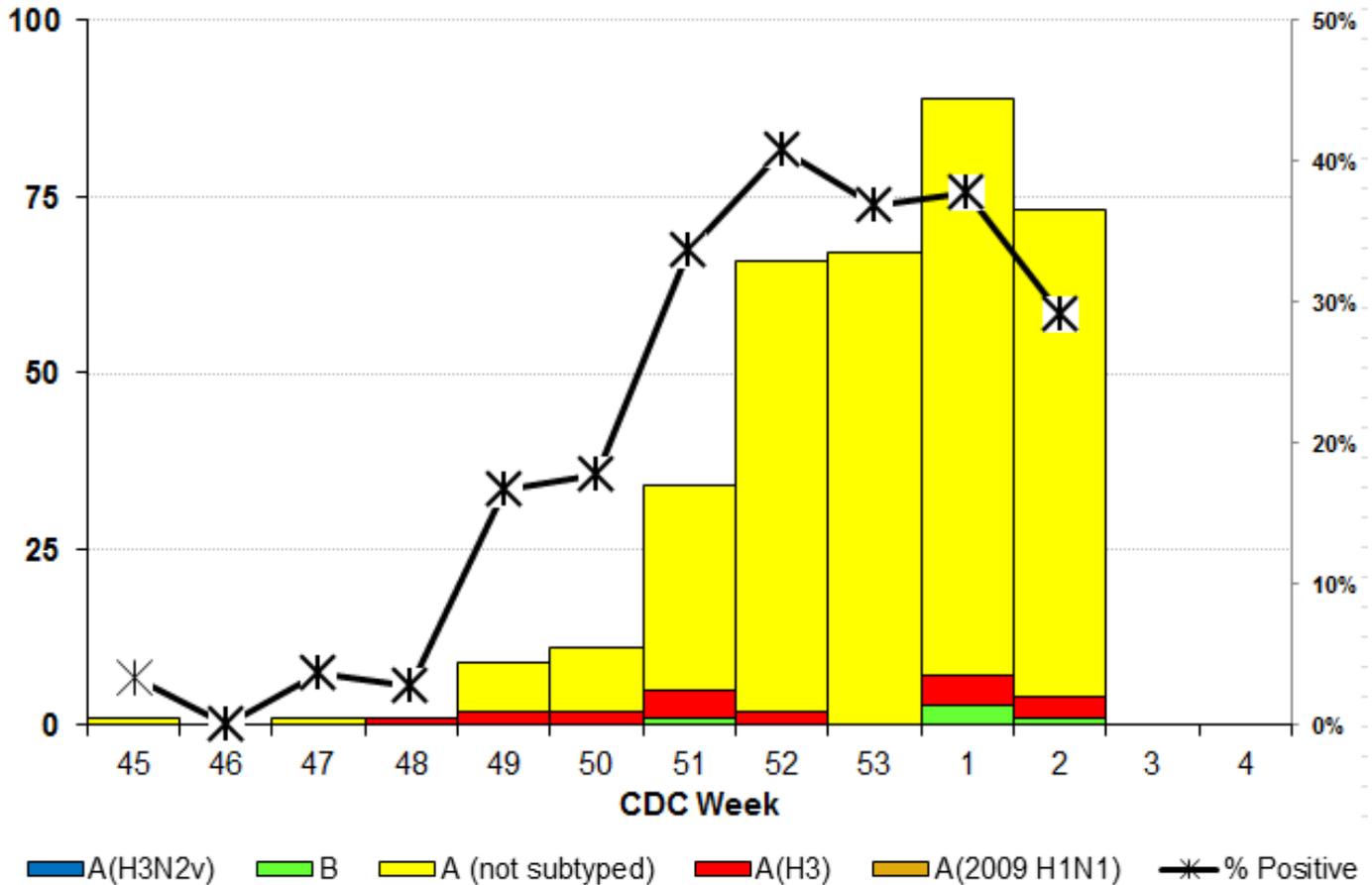


# Circulating Strains from Reporting Laboratories

Reporting laboratories also report what strain of influenza came back positive. The colored bars represent how much of each strain of influenza is being reported while the black line is the percent of reported lab tests being positive. During Week 2, CDC reported 19.47% of influenza tests as positive, Washington State reported 24.1% positive, and Clark County reported 29.2% positive.



**Number of Positive Influenza Tests by Week from Reporting Laboratories in Clark County**



# Vaccine Strains and Vaccine Match

2014-2015 influenza vaccines include either 3 or 4 strains of influenza. The trivalent vaccines have three strains: influenza A (H1N1), influenza A (H3N2), and influenza B (Yamagata lineage) strain. The quadrivalent vaccines have four strains which are the same as the trivalent vaccine strains except they have an additional influenza B (Victoria lineage) strain.

CDC recently released an interim estimate of seasonal vaccine match, noting that overall vaccine effectiveness against laboratory confirmed influenza associated with medically attended acute respiratory illness was 23% (95% confidence interval = 8% - 36%). The full report can be found [HERE](#).

As influenza season continues, CDC antigenically characterizes influenza viruses it receives to see how well they match the vaccine strains. Since October 1, CDC has characterized 508 influenza viruses [10 A(H1N1)pdm09, 395 A(H3N2), and 103 influenza B viruses].

## Influenza A (2009 H1N1) [vaccine strain: A/California/7/2009]

- 10 (100%) 2009 H1N1 virus tested was characterized as A/California/7/2009-like, the influenza A (H1N1) component of the 2014-2015 Northern Hemisphere influenza vaccine.

## Influenza A (H3N2) [vaccine strain: A/Texas/50/2012]

- 141 (35.7%) of the 395 H3N2 viruses tested have been characterized as A/Texas/50/2012-like, the influenza A (H3N2) component of the 2014-2015 Northern Hemisphere influenza vaccine.

## Influenza A (H3N2) [A/Switzerland/9715293/2013] (Not a component of the current seasonal vaccine)

- 254 (64.3%) of the 395 H3N2 viruses tested showed either reduced titers with antiserum produced against A/Texas/50/2012 or belonged to a genetic group that typically shows reduced titers to A/Texas/50/2012. Among viruses that showed reduced titers with antiserum raised against A/Texas/50/2012, most were antigenically similar to A/Switzerland/9715293/2013. A/Switzerland/9715293/2013 is related to, but antigenically and genetically distinguishable, from the A/Texas/50/2012 vaccine virus.

## Influenza B [vaccine strain: B/Massachusetts/2/2012 (Yamagata lineage)]

- 69 (100%) B/Yamagata-lineage viruses were characterized as B/Massachusetts/2/2012-like, which is included as an influenza B component of the 2014-2015 Northern Hemisphere trivalent and quadrivalent influenza vaccines.

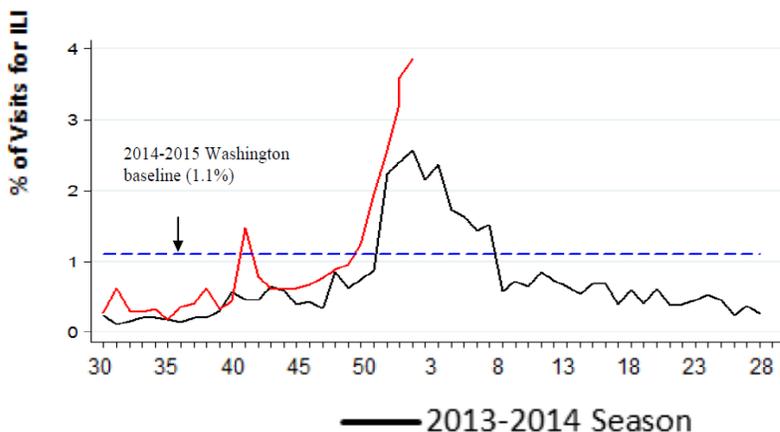
## Influenza B [quadrivalent vaccine strain: B/Brisbane/60/2008-like virus (Victoria lineage)]

- 30 (88.2%) of the 34 B/Victoria-lineage viruses were characterized as B/Brisbane/60/2008-like, the virus that is included as an influenza B component of the 2014-2015 Northern Hemisphere quadrivalent influenza vaccine. Four (11.8%) of the 7 B/Victoria-lineage viruses tested showed reduced titers to B/Brisbane/60/2008.

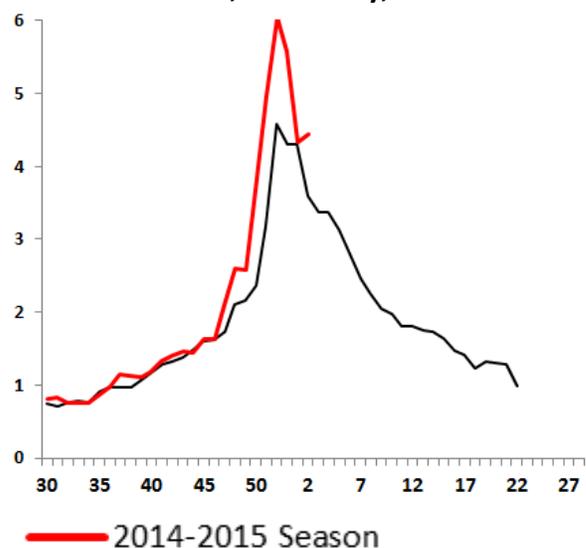
# Influenza-like-illness (ILI)

Sentinel Provider Data are the percent of patient visits to a clinic that meet the case definition for influenza-like illness (ILI). ILI is defined as fever  $\geq 100^{\circ}$  F or  $37.8^{\circ}$  C (oral or equivalent) AND cough and/or sore throat (in the absence of a known cause other than influenza). National ILI patient visits during Week 2 were 4.45%. Washington influenza-like-illness measures were well above the baseline of 1.1% in Week 2. The Week 41 spike in the Washington ILI data below is attributable to a high incidence of ILI visits at one facility.

Percentage of ILI Visits Reported by Sentinel Providers, Washington, 2013-2015



Percentage of ILI Visits Reported by Sentinel Providers, Nationally, 2013-2015

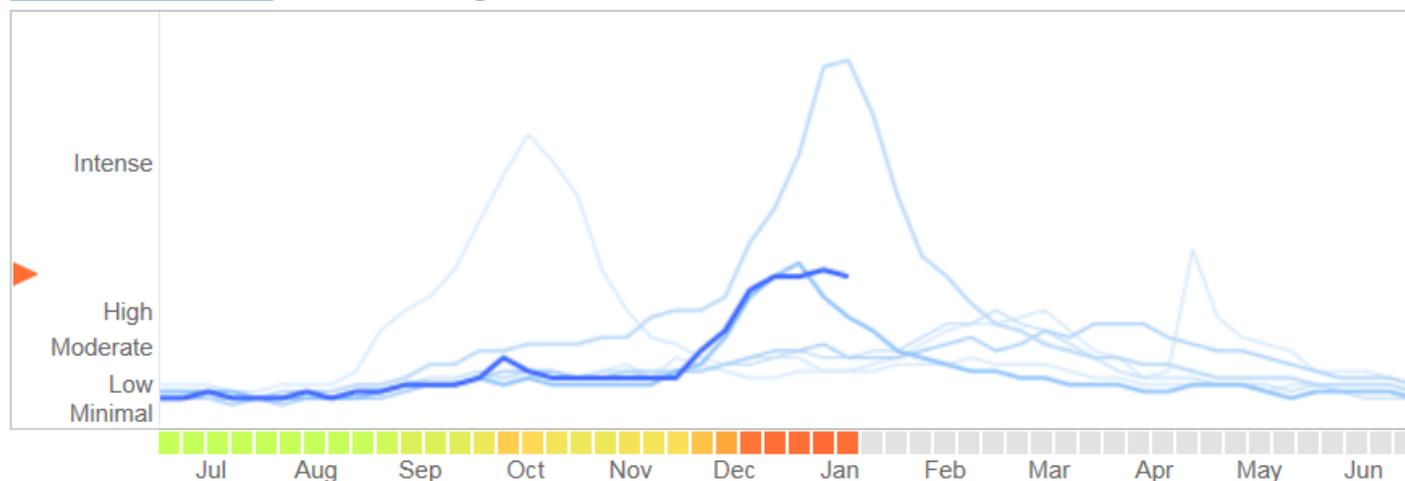


# Google Flu Trends

Google Flu Trends uses aggregate Google search data to estimate current flu activity. According to this measure, flu activity this year is similar to activity in previous years at this time. Below are the current estimates for Washington and Oregon compared to the past 7 years. <http://www.google.org/flutrends/>

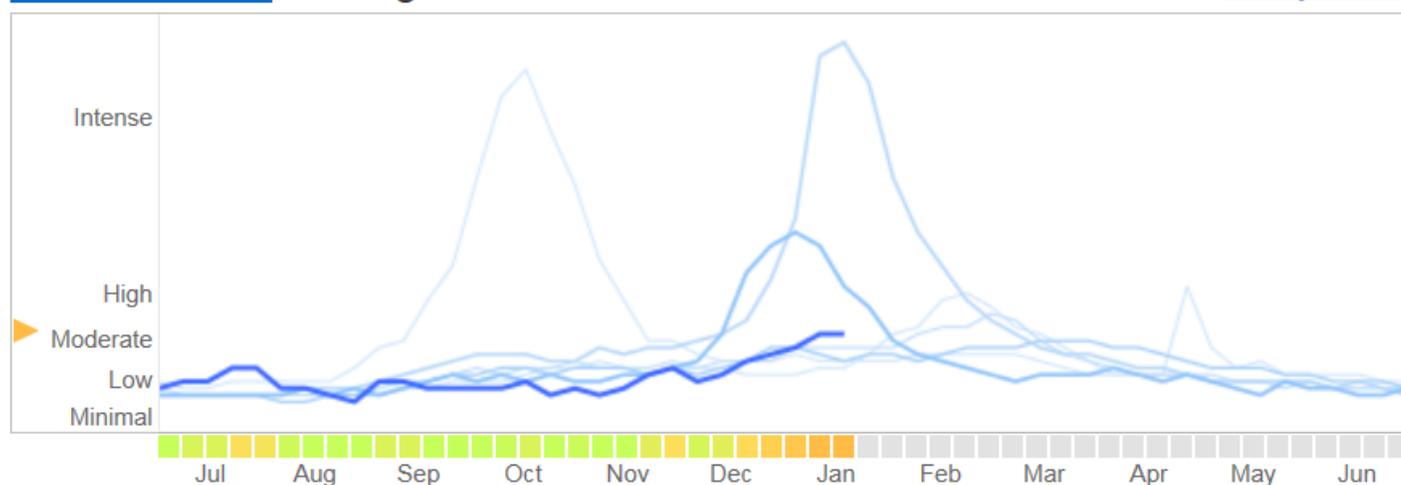
## United States > Washington

● 2014-2015 ● Past years ▼



## United States > Oregon

● 2014-2015 ● Past years ▼



## Other Respiratory Diseases of Interest

### Avian Influenza in Canada and Western United States

Since early December avian influenza has been detected in [Canada](#), [California](#), Washington, Oregon, [Idaho](#), and [Utah](#). No human cases of avian influenza have been reported. In Washington state, [Benton-Franklin](#), [Clallam](#), and [Whatcom](#) counties have reported avian influenza in wild or domestic birds. In Oregon, [Douglas](#) and [Lane](#) counties have reported avian influenza in backyard poultry and wild waterfowl, respectively.

In Washington, State Department of Agriculture (WSDA) and partners have depopulated affected flocks and are conducting enhanced surveillance for avian influenza in birds.

### MERS-CoV:

Middle East Respiratory Syndrome (MERS-CoV) is a novel coronavirus being reported out of the Arabian Peninsula, primarily Saudi Arabia. Most cases have been in the elderly and those with chronic medical conditions. As of January 2015, 944 laboratory confirmed cases have been [reported to the WHO](#). There is some evidence linking this virus to camels, although this is not definitive.

# Cowlitz County Influenza Surveillance Update

Cowlitz and Clark Counties are sister local health jurisdictions in Washington State. Although separate entities, both share a common goal of preventing disease and promoting public health. To that end, Cowlitz and Clark County often partner in disease response efforts. This year, Cowlitz and Clark counties are working together to provide reliable influenza surveillance; and subsequent reports through the 2014-2015 influenza season will include a section dedicated Cowlitz County data.

*All data are preliminary and may change as more reports are received*

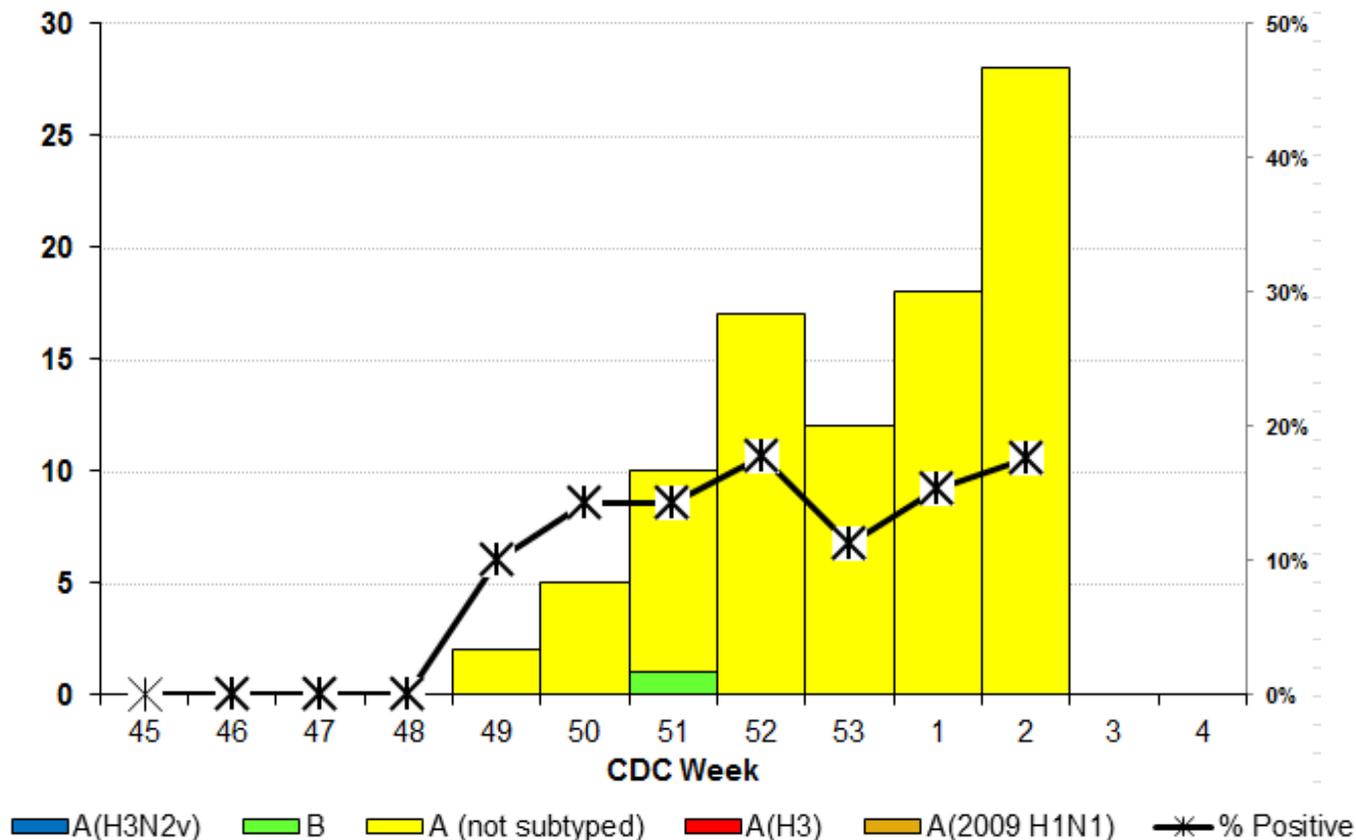
## Laboratory Data from Reporting Laboratories

The positivity rate is the percent of influenza tests done by reporting laboratories for this influenza season that are positive. Historically, the CDC has used  $\geq 10\%$  positivity to define flu seasons for modeling studies and for calculating influenza-like-illness baselines.

2014-2015											
CDC Week	Flu Week	Date Range	A (H1)	A (2009 H1N1)	A (H3)	A (not sub-typed)	Type B	Total influenza	No. Tested*	Positivity	
51	12	12/14-12/20	0	0	0	9	1	10	70	14.3%	
52	13	12/21-12/27	0	0	0	17	0	17	101	17.2%	
53	14	12/28-01/03	0	0	0	12	0	12	107	11.2%	
1	15	01/04-01/10	0	0	0	18	0	18	117	15.4%	
2	16	01/11-01/17	0	0	0	28	0	28	159	17.6%	

\*Includes Influenza A/B Rapid Antigen Tests

**Number of Positive Influenza Tests by Week from Reporting Laboratories in Cowlitz County**



## Influenza in Local News

Avian flu found in birds near Port Angeles

<http://www.columbian.com/news/2015/jan/19/avian-flu-found-in-birds-near-port-angeles/>

Flu vaccine not working well; only 23 percent effective

<http://www.columbian.com/news/2015/jan/15/flu-vaccine-not-working-well-only-23-percent-effec/>

5-year-old Tacoma girl dies from flu

[http://www.oregonlive.com/pacific-northwest-news/index.ssf/2015/01/5-year-old\\_tacoma\\_girl\\_dies\\_fr.html](http://www.oregonlive.com/pacific-northwest-news/index.ssf/2015/01/5-year-old_tacoma_girl_dies_fr.html)

Flu now widespread in Oregon, state health data show

[http://www.oregonlive.com/health/index.ssf/2015/01/oregon\\_flu\\_numbers.html](http://www.oregonlive.com/health/index.ssf/2015/01/oregon_flu_numbers.html)

Avian flu outbreak in Tri-Cities prompts warning

<http://www.columbian.com/news/2015/jan/14/avian-flu-outbreak-in-tri-cities-prompts-warning/>

## Resources on Influenza Activity in Washington and Nationwide

National influenza surveillance data are available at:

<http://www.cdc.gov/flu/weekly/>

Washington influenza surveillance data are available at:

<http://www.doh.wa.gov/Portals/1/Documents/5100/420-100-FluUpdate.pdf>

Oregon influenza surveillance data available at:

<http://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Influenza/Pages/surveil.aspx>

Recommendations of the Advisory Committee on Immunization Practices – ACIP – Influenza 2014-2015:

<http://www.cdc.gov/flu/professionals/acip/index.htm>

Disease outbreak news from the World Health Organization (WHO):

<http://www.who.int/csr/don/en/>

CDC Seasonal Influenza doses distributed:

<http://www.cdc.gov/flu/professionals/vaccination/vaccinesupply.htm>

## Contact Information

For more information please contact:

**Derel Glashower, MPH**

Epidemiologist

Clark County Public Health

Phone: 360-397-8003

Fax: 360-397-8080

[derel.glashower@clark.wa.gov](mailto:derel.glashower@clark.wa.gov)