



# Clark County Influenza Surveillance Update

CDC Week 10 (March 8—March 14)

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

## Summary

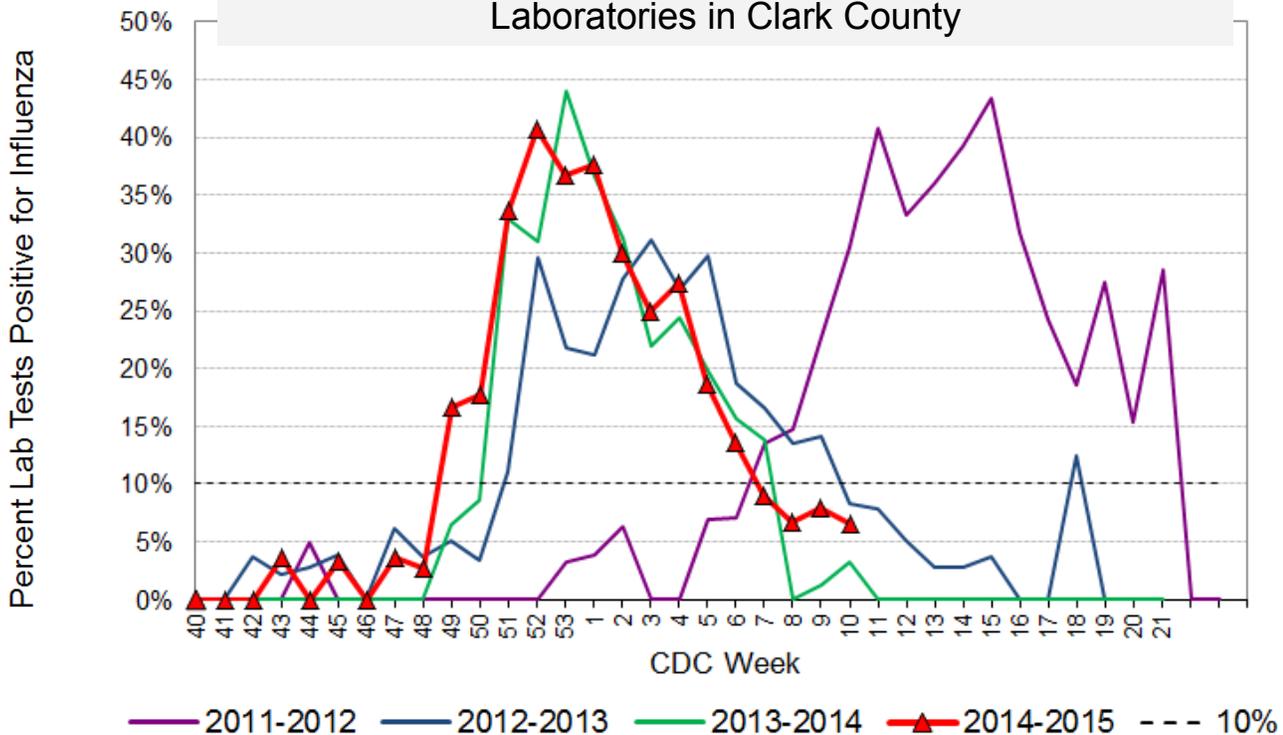
- During Week 10 (03/08/15 – 03/14/15) influenza activity in Clark County remained elevated (6.6%), but has fallen below 10% positivity thresholds.
- Influenza activity is characterized as regionally active in Washington State.
- During Week 10, the proportion of outpatient visits for influenza-like illness (ILI) in Washington State was 1.0%, below the state baseline of 1.1%.
- Nationally, most states reported [local or regional 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.

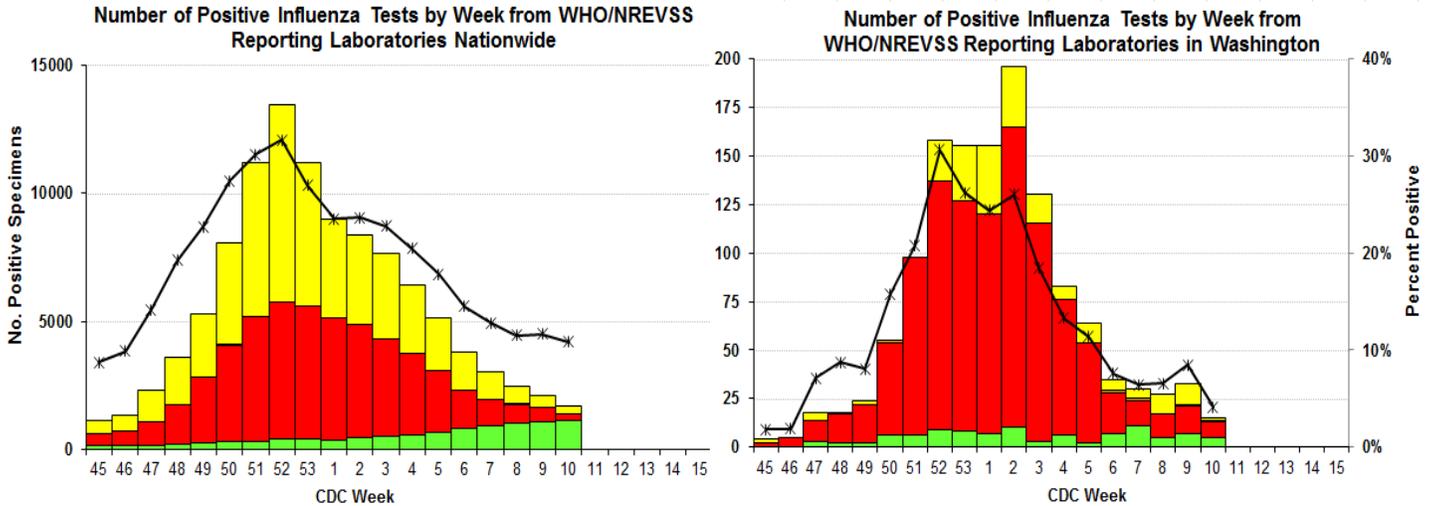
2014-2015											
CDC Week	Flu Week	Date Range	A (H1)	A (2009 H1N1)	A (H3)	A (not sub-typed)	Type B	Total influenza	No. Tested	Positivity	
6	20	02/08-02/14	0	0	0	22	0	22	161	13.7%	
7	21	02/15-02/21	0	0	0	10	0	10	112	8.9%	
8	22	02/22-02/28	0	0	0	8	0	8	120	6.7%	
9	23	03/01-03/07	0	0	0	5	2	7	89	7.9%	
10	24	03/08-03/14	0	0	0	3	1	4	61	6.6%	

Positivity Rate of Influenza Tests by Week from Reporting Laboratories in Clark County

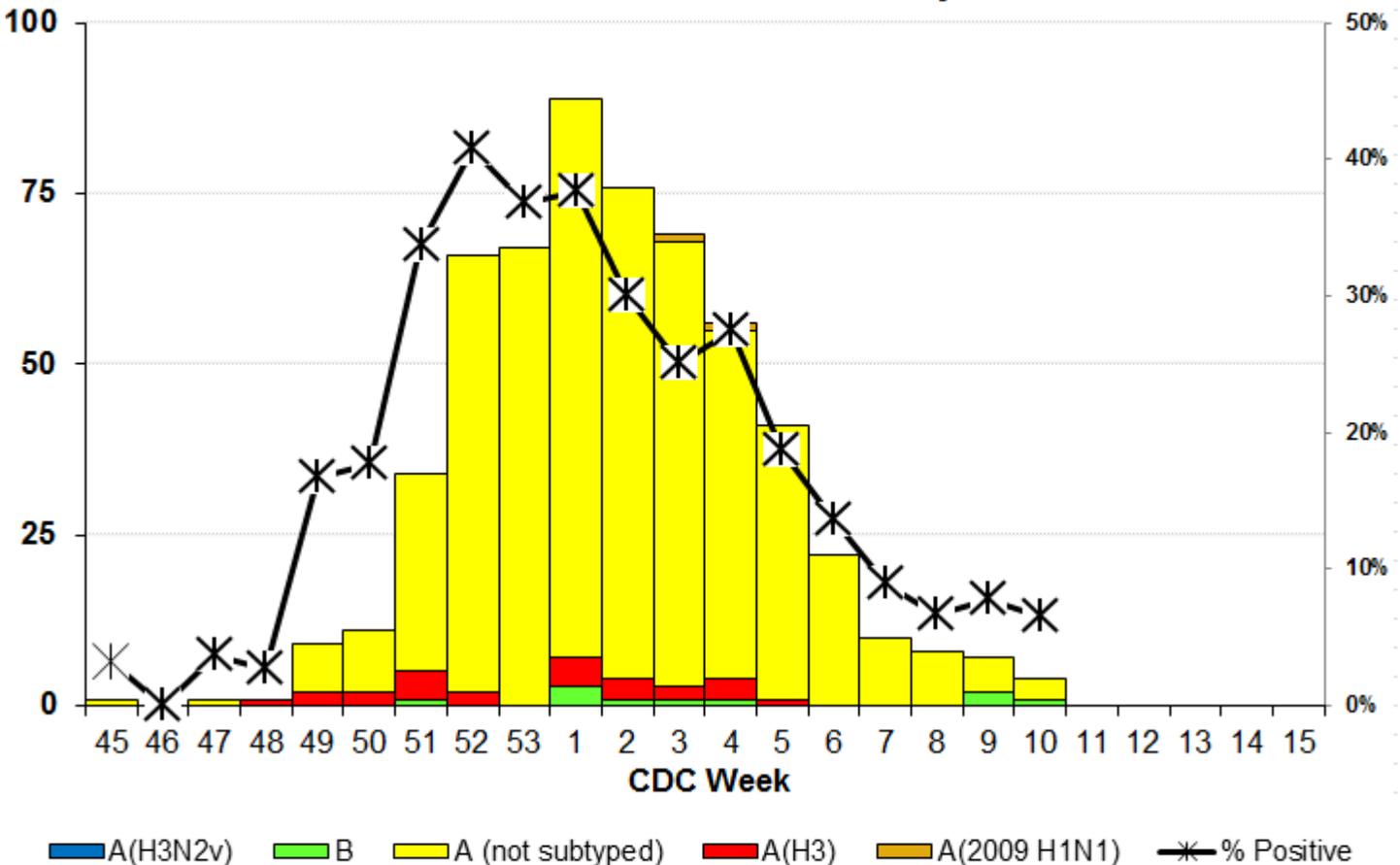


# Circulating Strains from Reporting Laboratories

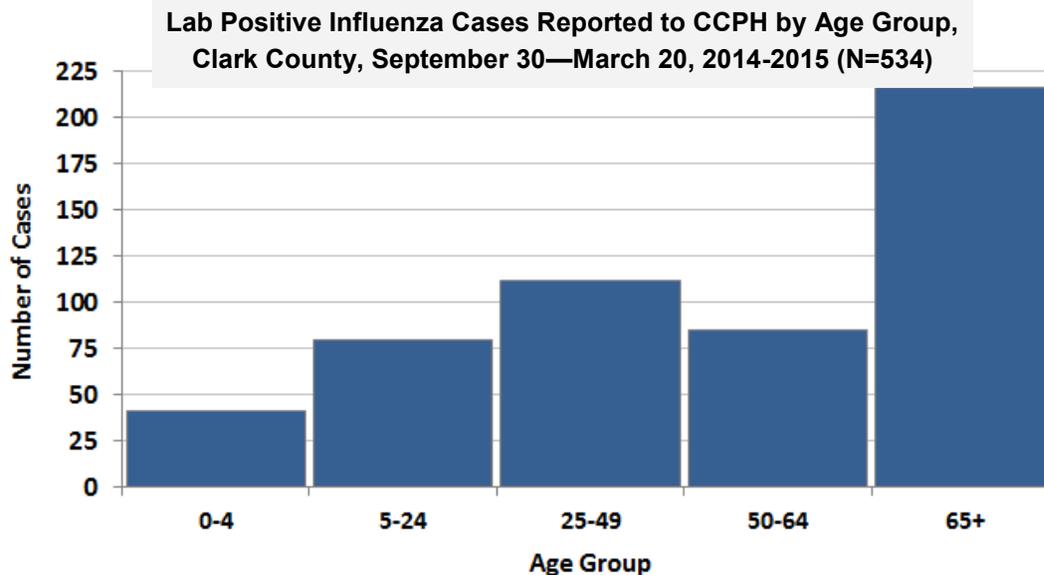
Reporting laboratories also report what strain of influenza came back positive. The colored bars represent how much of each strain of influenza is being reported while the black line is the percent of reported lab tests being positive. During Week 10, CDC reported 11.2% of influenza tests as positive, Washington State reported 4.1% positive, and Clark County reported 6.6% positive.



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



## Age Distribution of Lab Confirmed Influenza Cases



## 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 released an updated interim estimate of seasonal vaccine effectiveness (VE), noting that overall VE was 19% (95% confidence interval = 7% - 29%). The report can be found [HERE](#). Seasonal vaccine effectiveness from past years 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 1233 influenza viruses [27 A(H1N1)pdm09, 983 A (H3N2), and 223 influenza B viruses].

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

- 27 (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]

- 242 (24.6%) of the 983 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)

- 741 (75.4%) of the 983 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)]

- 150 (95.5%) of the 157 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. Seven (4.5%) of the B/Yamagata-lineage viruses tested showed reduced titers to B/Massachusetts/2/2012.

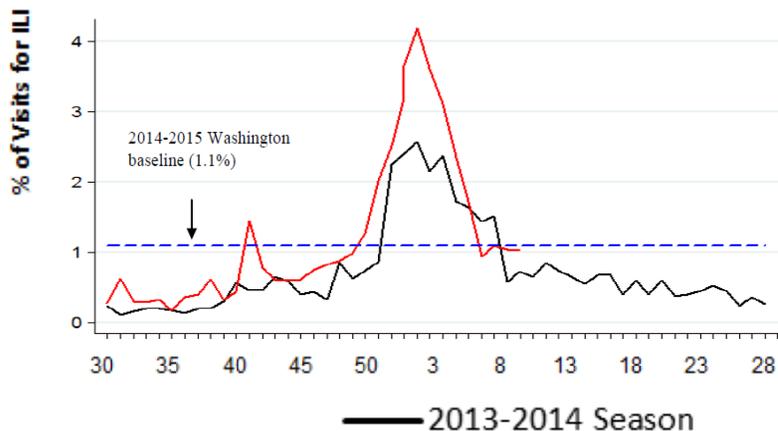
### Influenza B [quadrivalent vaccine strain: B/Brisbane/60/2008-like virus (Victoria lineage)]

- 62 (93.9%) of the 66 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 (6.1%) of the 7 B/Victoria-lineage viruses tested showed reduced titers to B/Brisbane/60/2008.

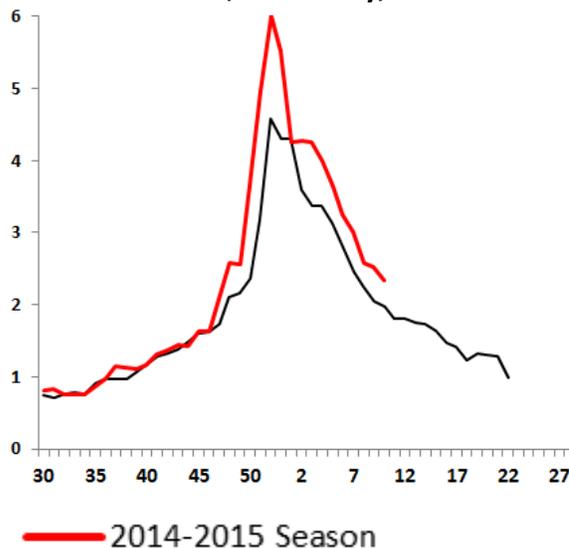
# Influenza-like-illness (ILI)

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  $\geq 100^{\circ}\text{F}$  or  $37.8^{\circ}\text{C}$  (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 10 were 2.33%. Washington influenza-like-illness measures were 1.0% in Week 10, below the baseline of 1.1%. 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**



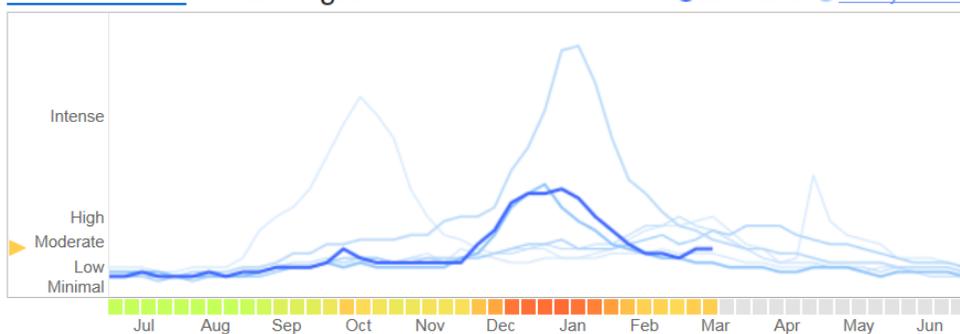
**Percentage of ILI Visits Reported by Sentinel Providers, Nationally, 2013-2015**



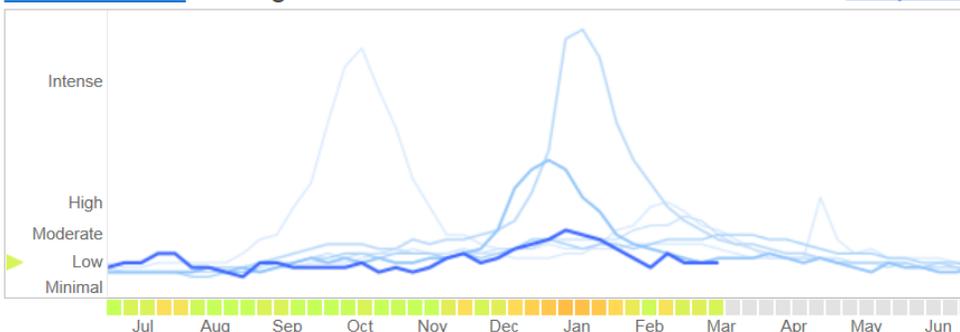
# Google Flu Trends

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**



**United States > Oregon**



## Measles:

An outbreak of measles in the United States has affected 17 states, resulting in 176 cases since January 1, 2015. Many of these cases are associated with a theme park in California. A [CDC MMWR](#) report was released on February 20, summarizing the outbreak in California. The recent increase in cases has ignited a national conversation about vaccinations, inspiring action in the political and legislative arenas.

## Avian Influenza in Canada and Western United States

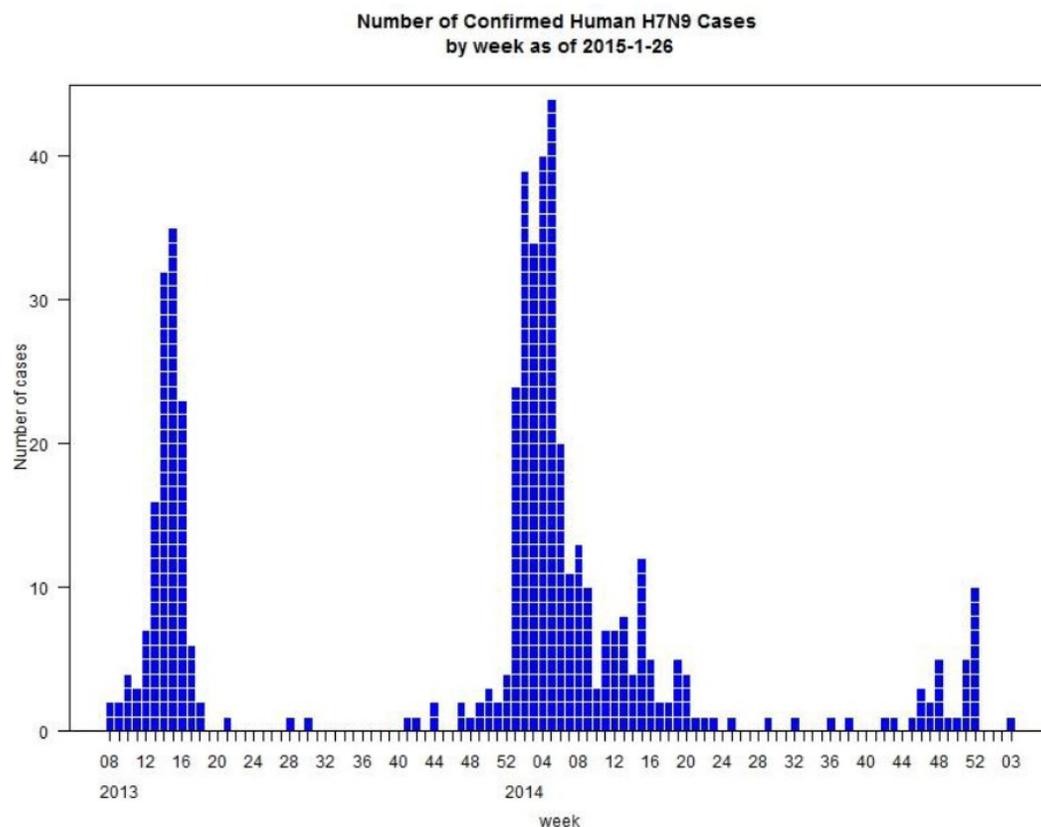
Since early December avian influenza has been detected in wild and domestic birds across a [number of states in the western US](#) and Canada. The CDC released an [MMWR summarizing outbreaks of avian influenza](#) in the US through January 2015. Of reported avian influenza detections and outbreaks, 24 people reported exposure to infected birds. Of those people, none have developed lab-confirmed avian influenza.

## 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 March 2015, 1075 laboratory confirmed cases, and at least 404 related deaths have been [reported to the WHO](#). There is some evidence linking this virus to camels, although this is not definitive.

## Avian Flu (H7N9) in China:

Two Canadian travelers, who reported visiting China, were recently diagnosed with avian influenza A (H7N9) in North America. Additionally, more than 500 cases have been reported globally since March 2013. On February 6, 2015 [CDC released an advisory](#) that people travelling to China should avoid contact with poultry, birds, and bird droppings. Below is an epi curve of global human H7N9 cases since 2013:



[http://www.who.int/influenza/human\\_animal\\_interface/Influenza\\_Summary\\_IRA\\_HA\\_interface\\_26January2015.pdf?ua=1](http://www.who.int/influenza/human_animal_interface/Influenza_Summary_IRA_HA_interface_26January2015.pdf?ua=1)

# 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.

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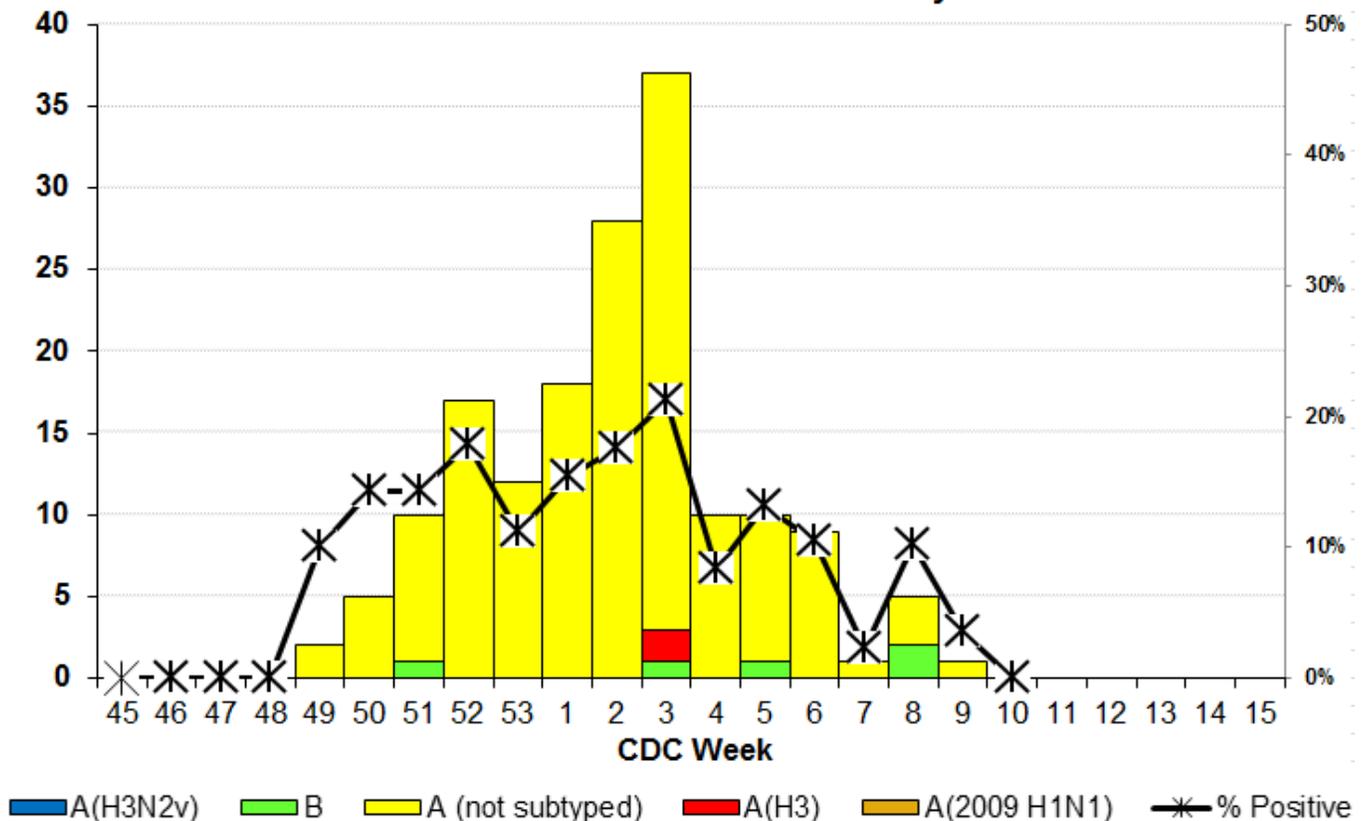
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9	23	03/01-03/07	0	0	0	1	0	1	28	3.6%
10	24	03/08-03/14	0	0	0	0	0	0	39	0.0%

\*Includes Influenza A/B Rapid Antigen Tests

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



## Influenza in Local News

More than 400 Washington foster parents object to flu shots

<http://www.columbian.com/news/2015/mar/20/washington-foster-parents-object-flu-shots/#>

Washington flu season most deadly in years, but not over

<http://www.columbian.com/news/2015/mar/01/washington-flu-season-most-deadly-years-not-over/#>

Legacy joins Providence in easing visitor restrictions as flu season wanes

[http://www.oregonlive.com/health/index.ssf/2015/02/legacy\\_joins\\_providence\\_in\\_eas.html](http://www.oregonlive.com/health/index.ssf/2015/02/legacy_joins_providence_in_eas.html)

Flu hospitalizations of elderly hit record high, CDC says

<http://www.columbian.com/news/2015/jan/30/flu-hospitalizations-elderly-record-cdc/#>

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/>

## 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)