



Delaware Weekly Influenza Report

MMWR Week 42 (October 15 - 21, 2017)

Delaware Division of Public Health

National Influenza Synopsis 2017-2018:

National data are updated Friday of each week. Please visit <http://www.cdc.gov/flu/weekly/> for the most current information. During MMWR Week 42 (October 15 - 21, 2017) influenza activity was low in the United States. The most frequently identified influenza virus type reported by public health laboratories during week 42 was influenza A. The percentage of respiratory specimens testing positive for influenza in clinical laboratories is low. For geographic spread **Regional influenza activity** was reported by Guam. **Local influenza activity** was reported by Puerto Rico and 12 states (Arizona, Colorado, Georgia, Hawaii, Kentucky, Louisiana, Maine, Massachusetts, New Mexico, Oklahoma, South Carolina and Texas). **Sporadic influenza activity** was reported by the District of Columbia and 33 states (Alabama, Alaska, Arkansas, California, Connecticut, Delaware, Florida, Idaho, Indiana, Iowa, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Jersey, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, Wisconsin and Wyoming). **No influenza activity** was reported by and five states (Illinois, Kansas, New Hampshire, Rhode Island and West Virginia). The U.S. Virgin Islands did not report. **!** Both national and state data are provisional and subject to change as additional reports are received.

Delaware Influenza Surveillance 2017-2018:

During MMWR Week 42, there was one laboratory-confirmed case of influenza reported among Delaware residents. Reports of influenza-like illness (ILI) received from participating providers, facilities and institutions in Delaware show ILI is 0.03% compared with Delaware's 2017-2018 baseline of 2.0%. Nationally, ILI is 1.3%, below the 2017-2018 national baseline of 2.2%.

Level of Influenza Activity in Delaware, MMWR Week 42:

Sporadic	Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI.
Influenza-like illness (ILI) is defined as patients presenting with fever of 100° F or greater, cough and/or sore throat in the absence of a known cause other than influenza.	
No Activity: No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.	
Sporadic: Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI.	
Local: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.	
Regional: Outbreaks of influenza or increases in ILI and recent laboratory-confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions. ³	
Widespread: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of the state with recent laboratory evidence of influenza in the state.	

¹ 2017-2018 Region 3 (DE, DC, MD, PA, VA and WV) baseline = 2.0%.

² Laboratory-confirmed case = case confirmed by viral culture or PCR.

³ Region = population under surveillance in a defined geographical subdivision of a state. Regions typically include several counties. Regional doesn't apply to states with ≤ four counties.

<u>In this report:</u>	<u>page</u>
Table 1a. Influenza positive cases reported statewide and county, by subtype / lineage and MMWR week, Delaware 2017-18	2
Table 1b. Influenza positive cases reported statewide and county, by age group and MMWR week, Delaware 2017-18	2
Figure 1. Confirmed cases of influenza by type and subtype / lineage, by MMWR week, Delaware 2017-18	3
Table 2. Influenza-related hospitalizations, statewide and county, by age group and MMWR week, Delaware 2017-18	3
Table 3. Influenza-related deaths by MMWR week, Delaware 2017-18	3
Table 4. Numbers of influenza cases reported by flu season, Delaware 2004-05 through 2017-18	4
Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers participating in CDC's ILINet, Delaware 2017-18	4
Figure 3. Influenza-like illness reported by ILI reporting partners by MMWR week, Delaware 2017-18	5
Figure 4a. Percentage of emergency department (ED) visits due to ILI/Flu by MMWR week, Delaware 2017-18	5
Figure 4b. County-specific percentages of ED visits due to ILI/Flu by MMWR week, Delaware 2017-18	5
Summary of International Influenza Activity	6

Table 1a. Influenza positive¹ cases reported² statewide and county by subtype (A) or lineage (B)³, Delaware 2017-18

Confirmed Flu Cases by Subtype / Lineage		Week 40	Week 41	Week 42	YTD	YTD Total	YTD County %
STATEWIDE	A / 2009 H1N1	0	0	0	0	1	
	A / 2012 H3N2	0	0	1	1		
	A / no subtype	0	0	0	0		
	B / Yamagata	0	0	0	0		
	B / Victoria	0	0	0	0		
	B / no lineage	0	0	0	0		
New Castle County	A / 2009 H1N1	0	0	0	0	1	100%
	A / 2012 H3N2	0	0	1	1		
	A / no subtype	0	0	0	0		
	B / Yamagata	0	0	0	0		
	B / Victoria	0	0	0	0		
	B / no lineage	0	0	0	0		
Kent County	A / 2009 H1N1	0	0	0	0	0	0
	A / 2012 H3N2	0	0	0	0		
	A / no subtype	0	0	0	0		
	B / Yamagata	0	0	0	0		
	B / Victoria	0	0	0	0		
	B / no lineage	0	0	0	0		
Sussex County	A / 2009 H1N1	0	0	0	0	0	0
	A / 2012 H3N2	0	0	0	0		
	A / no subtype	0	0	0	0		
	B / Yamagata	0	0	0	0		
	B / Victoria	0	0	0	0		
	B / no lineage	0	0	0	0		

Table 1b. Influenza positive¹ cases reported² statewide and county by age group, Delaware 2017-18

Confirmed Flu Cases by Age Group		Week 40	Week 41	Week 42	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	0	0	0	0	1	
	5-24 years	0	0	0	0		
	25-49 years	0	0	0	0		
	50-64 years	0	0	0	0		
	65+ years	0	0	1	1		
New Castle County	0-4 years	0	0	0	0	1	100%
	5-24 years	0	0	0	0		
	25-49 years	0	0	0	0		
	50-64 years	0	0	0	0		
	65+ years	0	0	1	1		
Kent County	0-4 years	0	0	0	0	0	0%
	5-24 years	0	0	0	0		
	25-49 years	0	0	0	0		
	50-64 years	0	0	0	0		
	65+ years	0	0	0	0		
Sussex County	0-4 years	0	0	0	0	0	0%
	5-24 years	0	0	0	0		
	25-49 years	0	0	0	0		
	50-64 years	0	0	0	0		
	65+ years	0	0	0	0		

¹ Based on patients with positive nucleic acid or viral culture test results reported to the Division of Public Health.

² Reports are by the date the laboratory results are obtained. As a result, prior weeks' counts may be adjusted to reflect additional cases received.

³ The Division of Public Health Laboratory now has the capability to identify lineage for Influenza B. Since some laboratories in the state do not have this capability, those influenza cases will be categorized as Influenza B, no lineage identified.

Figure 1. Confirmed cases¹ of influenza by type and subtype/lineage, Delaware 2017-18*

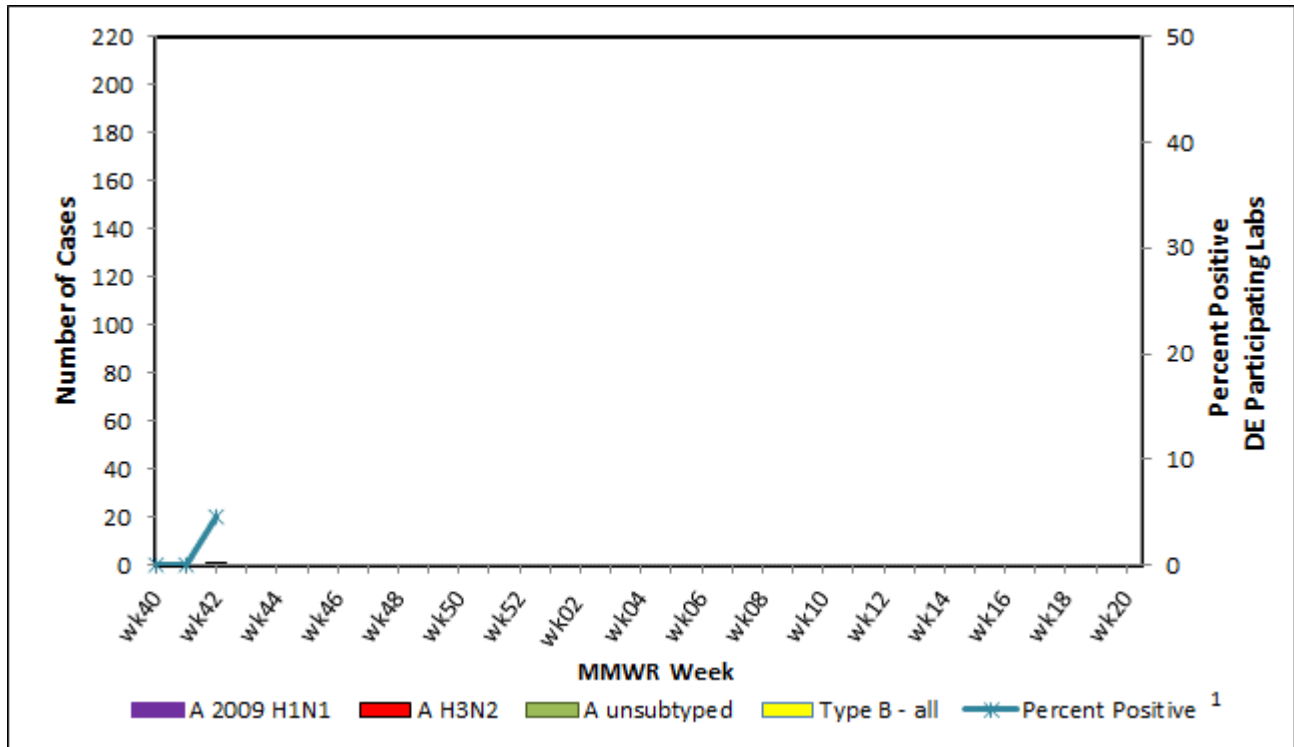


Table 2. Influenza-related hospitalizations statewide and county, by age group, Delaware 2017-18

Hospitalized Flu Cases by Age Group		Week 40	Week 41	Week 42	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	0	0	0	0	1	
	5-24 years	0	0	0	0		
	25-49 years	0	0	0	0		
	50-64 years	0	0	0	0		
	65+ years	0	0	1	1		
New Castle County	0-4 years	0	0	0	0	1	100%
	5-24 years	0	0	0	0		
	25-49 years	0	0	0	0		
	50-64 years	0	0	0	0		
	65+ years	0	0	1	1		
Kent County	0-4 years	0	0	0	0	0	0%
	5-24 years	0	0	0	0		
	25-49 years	0	0	0	0		
	50-64 years	0	0	0	0		
	65+ years	0	0	0	0		
Sussex County	0-4 years	0	0	0	0	0	0%
	5-24 years	0	0	0	0		
	25-49 years	0	0	0	0		
	50-64 years	0	0	0	0		
	65+ years	0	0	0	0		

Table 3. Influenza-related deaths, Delaware 2017-18

Influenza-Related Deaths	Week 40	Week 41	Week 42	YTD
	0	0	0	0

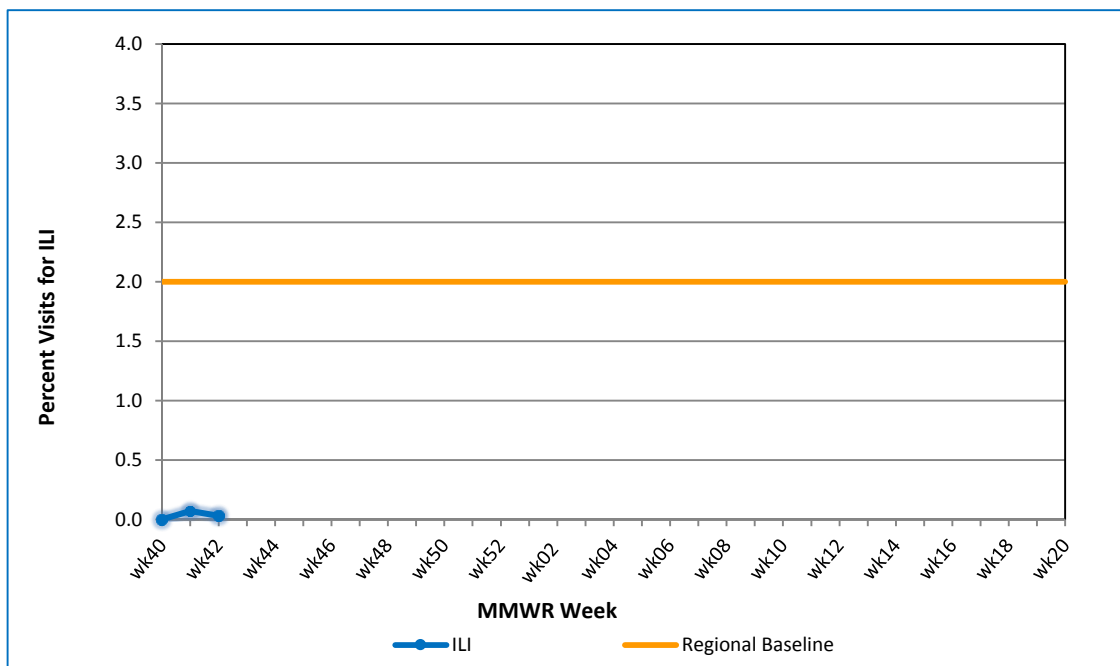
Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2017-18

Influenza Season	Total Annual Influenza Cases
2004 – 2005	995
2005 – 2006	541
2006 – 2007	508
2007 – 2008	1,401
2008 – 2009	738
2009 – 2010	2,247
2010 – 2011	1,479
2011 – 2012	267
2012 – 2013	1,781
2013 – 2014	1,842
2014 – 2015	2,390
2015 – 2016	1,842
2016 – 2017	4,590
2017 – 2018 (YTD)	1

U.S. Outpatient Influenza-Like Illness Surveillance Network (ILINet) Sentinel Providers

An ILINet (sentinel) provider conducts surveillance for influenza-like illness (ILI) in collaboration with the Division of Public Health and the Centers for Disease Control and Prevention (CDC). Data reported by ILINet providers, in combination with other influenza surveillance data, provide a national and statewide picture of influenza activity in the U.S.

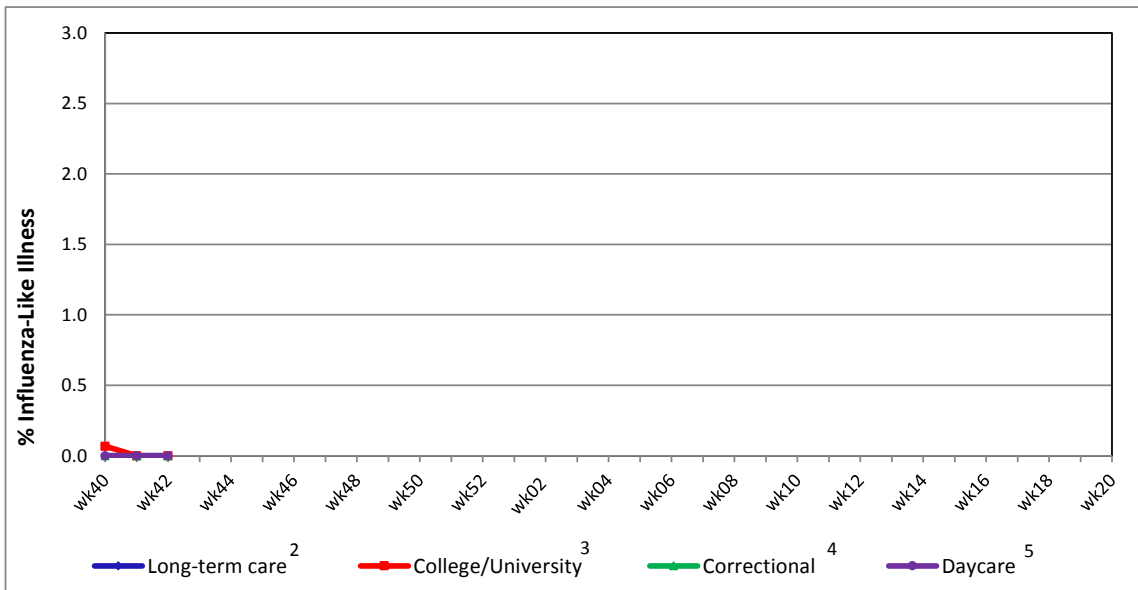
Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers¹ participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2017-18



¹ Twelve of 13 sentinel providers reported.

² Regional baseline is calculated by CDC using non-influenza weeks from the previous three influenza seasons. Delaware is in Region 3 that also includes DC, MD, PA, VA and WV.

Figure 3. Influenza-like illness reported by influenza surveillance ILI reporting partners¹, Delaware 2017-18



¹ ILINet reporting partners include long-term care facilities, colleges / universities, correctional facilities and daycare facilities.

² % ILI= percentage of residents with ILI symptoms. Seven long-term care facilities reported.

³ % ILI= percentage of student visits for ILI; Two universities reported.

⁴ % ILI= percentage of visits for ILI at the correctional facility; Nine correctional facilities reported.

⁵ % ILI= percentage of children absent with ILI; One daycare provider reported.

Figure 4a. Percentage of emergency department (ED) visits due to ILI/Flu by MMWR Week, Delaware, 2017-18

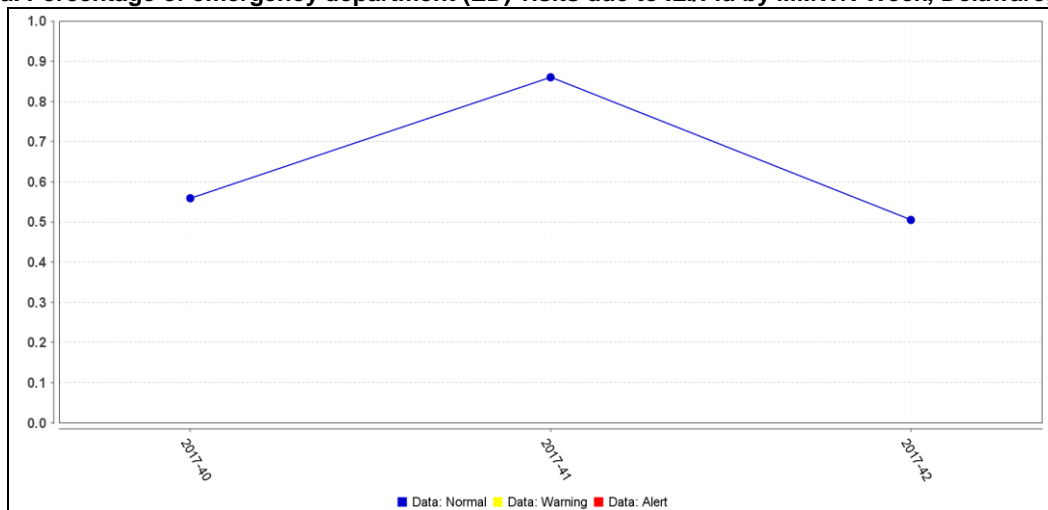
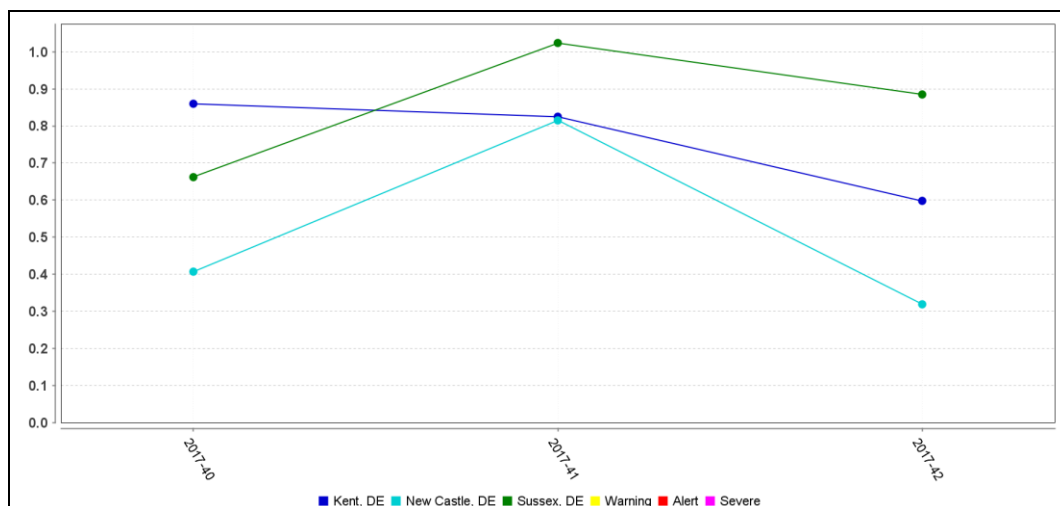


Figure 4b. County-specific percentages of ED visits due to ILI/Flu by MMWR Week, Delaware 2017-18



Summary of International Influenza Activity

Worldwide, influenza A(H3N2) and B viruses accounted for the majority of influenza detections. Influenza activity remained at low levels in the temperate zone of the northern hemisphere. Declining levels of influenza activity were reported in the temperate zone of the southern hemisphere and in some countries of South and South East Asia.

In North America, overall influenza virus activity remained low with detections of predominantly influenza A(H3N2) and B viruses in the past few weeks.

In the Caribbean and Central American countries, respiratory illness indicators and influenza activity remained low in general but RSV activity remained high in several countries.

In Europe, little to no influenza activity was reported.

In Western Asia, influenza activity continued to increase in Oman, with influenza A(H1N1)pdm09 and A(H3N2) viruses co-circulating. Increased influenza A detections were reported in Bahrain in recent weeks. In Central Asia, there were no updated reports on virus detections or respiratory illness indicators. In Southern Asia, decreasing levels of influenza activity were reported in India and Bhutan, with A(H1N1)pdm09 most frequently detected. In South East Asia, influenza activity appeared to decrease in general, with some exceptions. Influenza activity increased in Cambodia and remained high in Lao PDR, with influenza A(H3N2) viruses predominantly detected. In East Asia, influenza activity remained low in general.

In temperate South America, influenza and respiratory syncytial virus (RSV) activity continued a downward trend throughout most of the sub-region. In tropical South America, influenza and RSV activity remained at low levels overall.

In Northern Africa, little to no influenza virus detections was reported. In Southern Africa, influenza activity continued to decrease in South Africa, with influenza B viruses most frequently detected. In Western Africa, influenza detections continued to be reported, with all seasonal influenza subtypes present in the region. In Middle Africa, elevated ILI activity was reported in Cameroon. In Eastern Africa, influenza detections and ILI activity increased sharply in Réunion Island (French Overseas Department), with influenza B viruses predominant.

In Oceania, seasonal influenza activity started to decline, with influenza A(H3N2) predominant, followed by B viruses.

Reference: World Health Organization (WHO), 2017. Influenza Update number 300 (10/16/17). Retrieved October 18, 2017, from http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/. Reports are updated biweekly.

NOTE: Data provided do not reflect the total number of individuals who have been infected with the influenza virus in Delaware during the reporting period due to the following factors:

- Many people ill with influenza-like symptoms do not seek medical care.
- Many who do seek medical care are not tested for influenza.
- The Delaware Public Health Laboratory is limited by capacity to processing a maximum of three specimens per day from each reporting entity.

The Delaware Division of Public Health (DPH) is committed to serving you better by providing the most accurate, up-to-date influenza data available.

- For general information on influenza, visit flu.delaware.gov or <http://dhss.delaware.gov/dhss/dph/dpc/immunize-flu.html>.
- For specific information on DPH flu clinics, visit <http://dhss.delaware.gov/dhss/dph/fluclinics.html>.
- For questions on Delaware's weekly flu report, call the DPH Office of Infectious Disease Epidemiology: 302-744-4990.
- For questions regarding influenza vaccination, please call 302-744-1060.