



# Delaware Weekly Influenza Report

## MMWR Week 40 (September 30 - October 6, 2018)

### Delaware Division of Public Health

#### National Influenza Synopsis 2018-2019:

National data are updated Friday of each week. Please visit <http://www.cdc.gov/flu/weekly/> for the most current information. Influenza activity in the United States remained low throughout the summer months and early October. While influenza B viruses were more commonly detected from May until late June, influenza A viruses have predominated from the beginning of July onward. The percentage of respiratory specimens testing positive for influenza in clinical laboratories is low. Geographic spread during MMWR Week 40 (September 30 - October 6, 2018): **Local influenza activity** was reported by ): **Local influenza activity** was reported by Hawaii and Massachusetts. **Sporadic influenza activity** was reported by 35 states (Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, Nevada, New Jersey, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Utah, Washington, West Virginia, Wisconsin and Wyoming). **No activity** was reported by 12 states (Alabama, Illinois, Kansas, Mississippi, Nebraska, New Hampshire, Oklahoma, Rhode Island, South Carolina, Tennessee, Vermont, and Virginia). Guam, Puerto Rico and New Mexico did not report. Both national and state data are provisional and subject to change as additional reports are received.

#### Delaware Influenza Surveillance 2018-2019:

During MMWR Week 40, which marks the beginning of the official 2018-2019 flu season, there were six laboratory-confirmed cases of influenza reported among Delaware residents. Reports of influenza-like illness (ILI) received from participating providers, facilities and institutions in Delaware show ILI is 0.0% compared with Delaware's 2018-2019 baseline of 2.0%. Nationally, ILI is 1.4%, below the 2018-2019 national baseline of 2.2%.

#### Level of Influenza Activity in Delaware, MMWR Week 40:

<b>Sporadic</b>	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.	
<b>No Activity:</b> No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.	
<b>Sporadic:</b> 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.	
<b>Local:</b> Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.	
<b>Regional:</b> 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. <sup>3</sup>	
<b>Widespread:</b> 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.	

<sup>1</sup> 2018-2019 Region 3 (DE, DC, MD, PA, VA and WV) baseline = 2.0%.

<sup>2</sup> Laboratory-confirmed case = case confirmed by viral culture or PCR.

<sup>3</sup> 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.

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**Table 1a. Influenza positive<sup>1</sup> cases reported<sup>2</sup> statewide and county by subtype (A) or lineage (B)<sup>3</sup>, Delaware, by influenza season**

Confirmed Flu Cases by Subtype / Lineage		2017 – 2018 Season				2018 – 2019 Season				
		Wks 40-20	Wks 21-30	Wks 31-39	Total 2017-2018	Week 40	YTD	YTD Total	YTD County %	
STATEWIDE	A / 2009 H1N1	260	0	3	263	9,051	1	1	6	
	A / 2012 H3N2	389	0	0	389		0	0		
	A / no subtype	4,867	2	8	4,877		4	4		
	Co-infection	35	0	0	35		0	0		
	B / Yamagata	197	0	0	197		0	0		
	B / Victoria	97	0	0	97		0	0		
	B / no lineage	3,188	3	2	3,193		1	1		
New Castle County	A / 2009 H1N1	104	0	3	107	3,172	1	0	2	33%
	A / 2012 H3N2	274	0	0	274		0	0		
	A / no subtype	1,440	0	3	1,443		1	1		
	Co-infection	11	0	0	11		0	0		
	B / Yamagata	144	0	0	144		0	0		
	B / Victoria	77	0	0	77		0	0		
	B / no lineage	1,115	1	0	1,116		0	0		
Kent County	A / 2009 H1N1	109	0	0	109	2,136	0	0	3	50%
	A / 2012 H3N2	49	0	0	49		0	0		
	A / no subtype	1,290	1	1	1,292		3	3		
	Co-infection	5	0	0	5		0	0		
	B / Yamagata	21	0	0	21		0	0		
	B / Victoria	5	0	0	5		0	0		
	B / no lineage	654	0	1	655		0	0		
Sussex County	A / 2009 H1N1	47	0	0	47	3,743	0	0	1	17%
	A / 2012 H3N2	66	0	0	66		0	0		
	A / no subtype	2,137	1	4	2,142		0	0		
	Co-infection	19	0	0	19		0	0		
	B / Yamagata	32	0	0	32		0	0		
	B / Victoria	15	0	0	15		0	0		
	B / no lineage	1,419	2	1	1,422		1	1		

**Table 1b. Influenza positive<sup>1</sup> cases reported<sup>2</sup> statewide and county by age group, Delaware, by influenza season**

Confirmed Flu Cases by Age Group		2017 – 2018 Season				2018 – 2019 Season				
		Wks 40-20	Wks 21-30	Wks 31-39	Total 2017-2018	Week 40	YTD	YTD Total	YTD County %	
STATEWIDE	0-4 years	1,679	1	2	1,682	9,051	0	0	5	
	5-24 years	3,118	1	3	3,122		0	0		
	25-49 years	1,480	0	3	1,483		3	3		
	50-64 years	1,127	0	2	1,129		0	0		
	65+ years	1,631	1	3	1,635		2	2		
New Castle County	0-4 years	648	1	1	650	3,172	0	0	2	33%
	5-24 years	971	0	1	972		0	0		
	25-49 years	517	0	2	519		2	2		
	50-64 years	429	0	0	429		0	0		
	65+ years	600	0	2	602		0	0		
Kent County	0-4 years	415	0	0	415	2,136	0	0	3	50%
	5-24 years	772	0	1	773		0	0		
	25-49 years	388	0	1	389		1	1		
	50-64 years	244	0	0	244		0	0		
	65+ years	314	1	0	315		2	2		
Sussex County	0-4 years	616	0	1	617	3,743	0	0	1	17%
	5-24 years	1,375	1	1	1,377		1	1		
	25-49 years	575	0	0	575		0	0		
	50-64 years	454	0	2	456		0	0		
	65+ years	717	0	1	718		0	0		

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

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

<sup>3</sup> 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 are categorized as Influenza B, no lineage identified.

Figure 1. Confirmed cases<sup>1</sup> of influenza by type and subtype/lineage, Delaware 2018-2019 influenza season\*

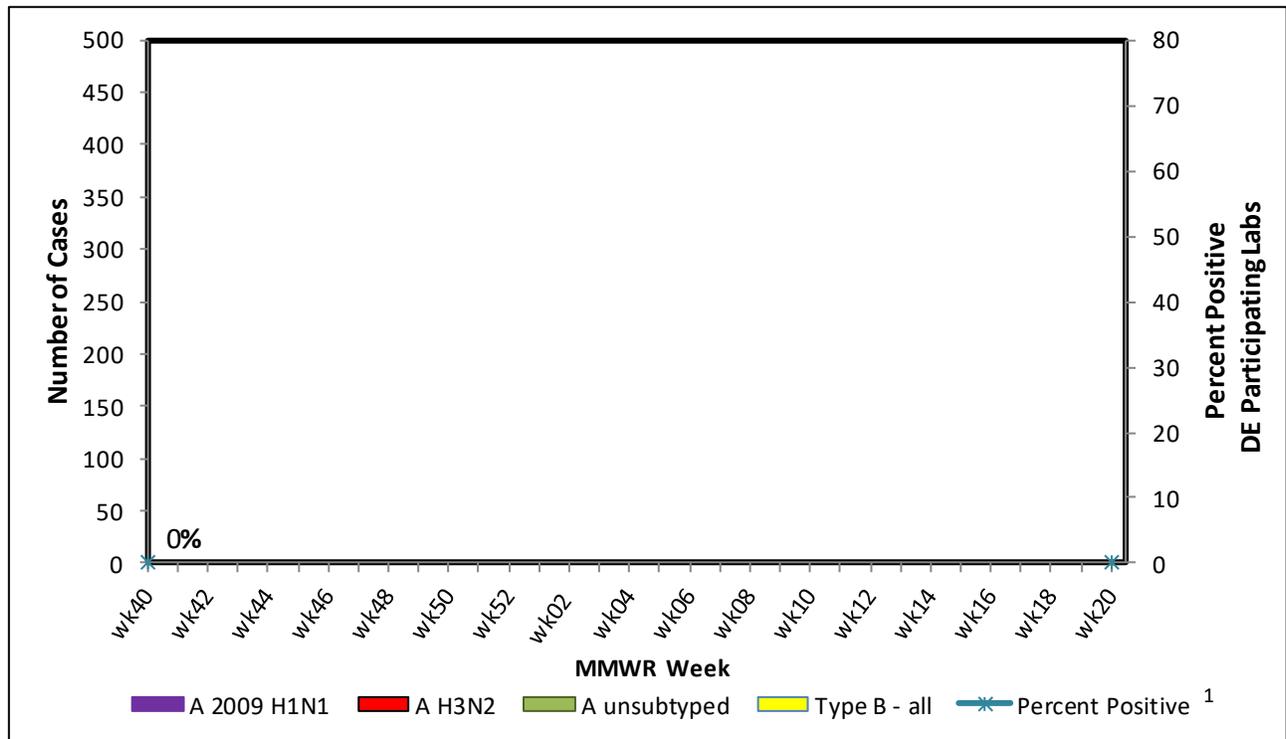


Table 2. Influenza-related hospitalizations statewide and county, by age group, Delaware, by influenza season

Hospitalized Flu Cases by Age Group		2017 – 2018 Season				2018 – 2019 Season			
		Wks 40-20	Wks 21-30	Wks 31-39	Total 2017-2018	Week 40	YTD	YTD Total	YTD County %
STATEWIDE	0-4 years	69	0	0	69	0	0	0	
	5-24 years	57	0	0	57	0	0		
	25-49 years	101	0	1	102	0	0		
	50-64 years	248	0	0	248	0	0		
	65+ years	769	1	1	771	0	0		
New Castle County	0-4 years	54	0	0	54	0	0	0	0
	5-24 years	43	0	0	43	0	0		
	25-49 years	56	0	1	57	0	0		
	50-64 years	142	0	0	142	0	0		
	65+ years	374	0	0	374	0	0		
Kent County	0-4 years	8	0	0	8	0	0	0	0
	5-24 years	7	0	0	7	0	0		
	25-49 years	27	0	0	27	0	0		
	50-64 years	50	0	0	50	0	0		
	65+ years	165	1	0	166	0	0		
Sussex County	0-4 years	7	0	0	7	0	0	0	0
	5-24 years	7	0	0	7	0	0		
	25-49 years	18	0	0	18	0	0		
	50-64 years	56	0	0	56	0	0		
	65+ years	230	0	1	231	0	0		

Table 3. Influenza-related deaths, Delaware, by influenza season

Influenza-Related Deaths	2017 – 2018 Season				2018 – 2019 Season	
	Wks 40-20	Wks 21-30	Wks 31-39	Total 2017-2018	Week 40	YTD
	35	0	0	35	0	0

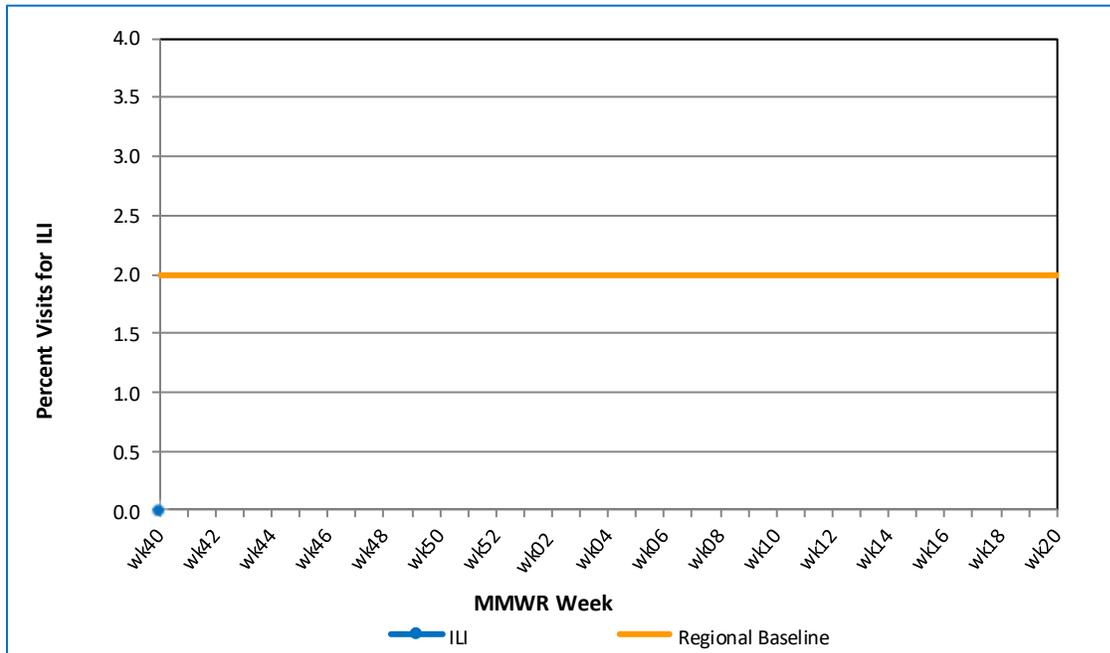
**Table 4. Annual number of influenza cases reported by flu season, Delaware 2004-05 through 2018-19**

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	9,051
<b>2018 – 2019 (YTD)</b>	<b>6</b>

**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.

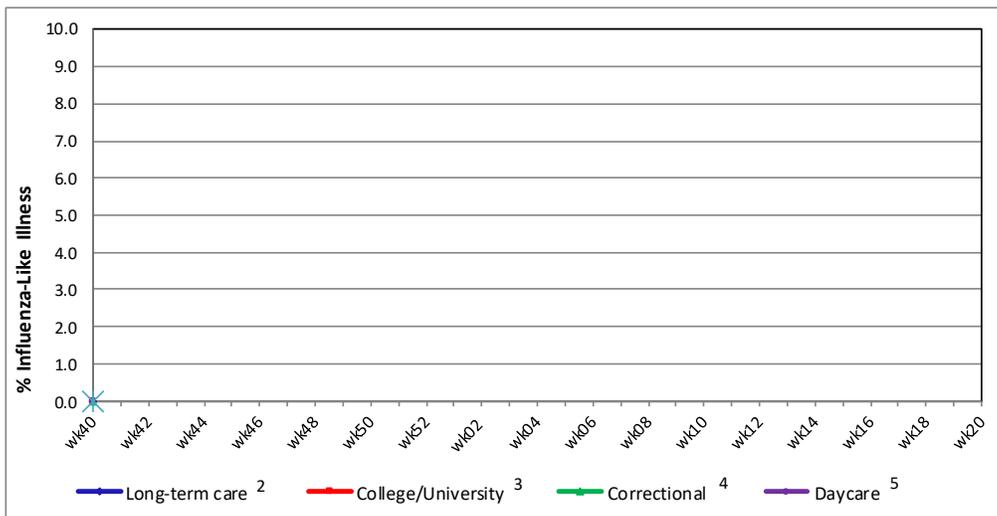
**Figure 2. Percentage of visits for influenza-like illness reported by sentinel providers<sup>1</sup> participating in the U.S. Outpatient ILI Surveillance Network (ILINet), Delaware 2018-19**



<sup>1</sup> Ten of 12 sentinel providers reported.

<sup>2</sup> 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 partners<sup>1</sup>, Delaware 2018-19**



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

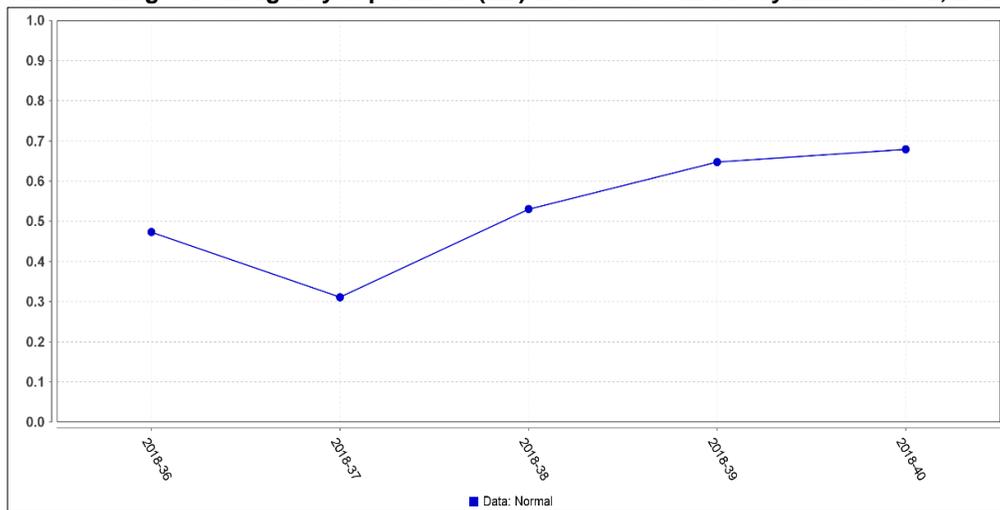
<sup>2</sup> % ILI= percentage of residents with ILI symptoms. Five long-term care facilities reported.

<sup>3</sup> % ILI= percentage of student visits for ILI; Two universities reported.

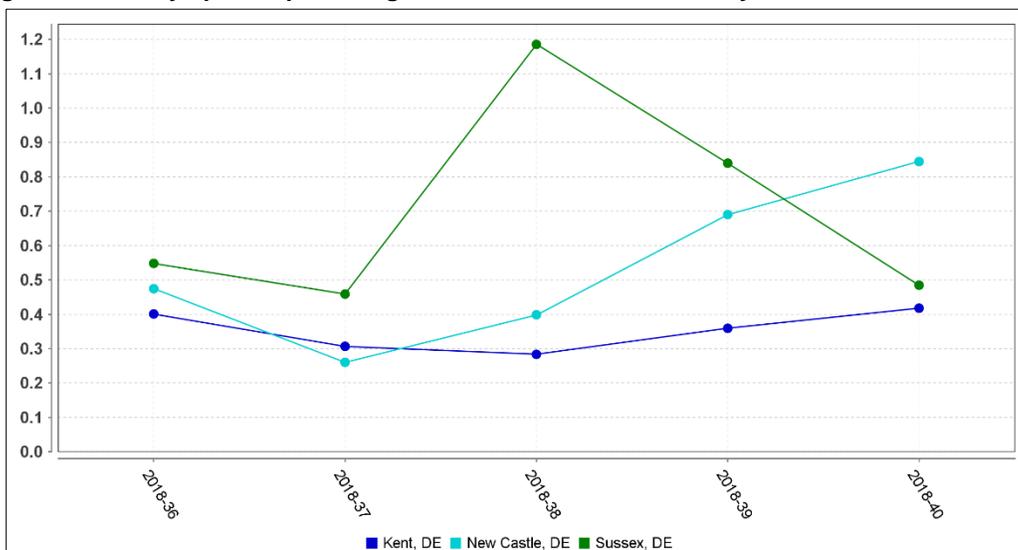
<sup>4</sup> % ILI= percentage of visits for ILI at the correctional facility; Nine correctional facilities reported.

<sup>5</sup> % 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, 2018-19**



**Figure 4b. County-specific percentages of ED visits due to ILI/Flu by MMWR Week, Delaware 2018-19**



## **Summary of International Influenza Activity**

Worldwide, seasonal influenza subtype A viruses accounted for the majority of detections.

Overall, influenza activity was at low levels in Canada and the United States, with influenza B predominating. In México, decreased influenza and SARI activity was reported with influenza A(H1N1)pdm09 and B co-circulating.

In the Caribbean, influenza virus activity decreased, and low RSV activity was reported throughout most of the sub-region. In Cuba and Haiti, influenza A(H1N1)pdm09 circulation was associated with low SARI activity.

In Central America, epidemiological indicators remained at moderate levels and influenza circulation was reported to increase throughout the sub-region. In Panama and Guatemala RSV circulation continued elevated. In Guatemala, influenza A(H1N1)pdm09 and SARI activity decreased. In El Salvador and Nicaragua, increased influenza A(H1N1)pdm09 and B circulation was reported.

In Europe, influenza activity was at out-of-season levels in all countries.

In the temperate zones of the southern hemisphere, influenza activity appeared to decrease in South America and Southern Africa. Influenza activity remained at low seasonal levels in Australia and New Zealand and at inter-seasonal levels in most of temperate zone of the northern hemisphere. Increased influenza detections were reported in some countries of Southern and South-East Asia.

**Reference:** World Health Organization (WHO), 2017. Influenza Update number 325 (9/16/2018). Retrieved October 8, 2018, from [http://www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/) Reports are updated biweekly.

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**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](http://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.