

Texas Influenza Surveillance Report 2019-2020 Season/2020 MMWR Week 23

(May 31, 2020 – June 6, 2020)
Report produced on 06/12/2020

Summary

*Please note, some aspects of influenza surveillance may be affected by current COVID-19 response activities. For information about COVID-19 in Texas, please visit www.dshs.texas.gov/coronavirus.

Compared to the previous week, the percentage of specimens testing positive for influenza reported by hospital laboratories has slightly increased. The percentage of patient visits due to influenza-like illness (ILI) has also slightly increased. No influenza-associated pediatric deaths were reported. No influenza-associated institutional outbreaks or school closures were reported.

Table 1: Summary of Texas Influenza (Flu) and Influenza-like Illness (ILI) Activity for the Current Week

Texas Surveillance Component	Change from Previous Week	Current Week	Previous Week [†]	Page of Report
Statewide influenza activity level reported to CDC (geographic spread of influenza)	Not determined during the summer	N/A	N/A	--
Statewide ILINet Activity Indicator assigned by CDC (intensity of influenza-like illness)	Not determined during the summer	N/A	N/A	--
Percentage of specimens positive for influenza by hospital laboratories	▲ 0.28%	0.45%	0.17%	1
Percentage of visits due to ILI (ILINet)	▲ 0.22%	1.28%	1.06%	2
Number of regions reporting increased flu/ILI activity	▲ 1	1	0	4
Number of regions reporting decreased flu/ILI activity	▼ 1	1	2	4
Number of variant/novel influenza infections	No cases reported	0	0	4
Number of ILI/influenza outbreaks	No change	0	0	4
Number of pediatric influenza deaths	No change	0	0	6

Laboratory Results

Influenza

*In response to the COVID-19, influenza testing at Texas Public Health Laboratories has significantly decreased to increase capacity for SARS-CoV-2 testing. Please note, this will affect data in Table 3 and Figure 2.

Hospital laboratories across Texas voluntarily report influenza tests (antigen, culture, and PCR) to the National Respiratory and Enteric Virus Surveillance System (NREVSS). Providers throughout Texas also submit specimens for influenza testing (PCR) to Texas public health laboratories, including the Texas Department of State Health Services (DSHS) state laboratory in Austin and the nine Texas Laboratory Response Network (LRN) laboratories. The results reported by Texas NREVSS participants and public health laboratories for the current week are summarized in the two tables below. Additional influenza test results (rapid tests, culture, PCR) and ILI activity were reported from providers and public health departments throughout the state (see county map at the end of this report).

Table 2: Influenza Testing Performed by Texas Hospital Laboratories for the Current Week

	Week 23	Season to Date Week Ending: June 6, 2020
Number of labs reporting flu tests	15	
Number of specimens tested	440	218328
Number of positive specimens (%) [†]	2 (0.45%)	51746 (23.70%)
Percentage of total tests that were antigen detection tests	19.32%	
Positive specimens by type/subtype [n (%)]		
Influenza A	0 (0.00%)	26503 (51.22%)
Subtyping performed	0 (0.00%)	2149 (8.11%)
A (H1N1)	0 (0.00%)	1970 (91.67%)
A (H3N2)	0 (0.00%)	179 (8.33%)
Subtyping not performed	0 (0.00%)	24354 (91.89%)
Influenza B	2 (100.00%)	25243 (48.78%)

Table 3: Influenza Testing Performed by Texas Public Health Laboratories for the Current Week

	Week 23	Season to Date Week Ending: June 6, 2020
Number of labs reporting flu tests	0	
Number of specimens tested	0	2269
Number of positive specimens (%) [†]	0 (0.00%)	1343 (59.19%)
Positive specimens by type/subtype/lineage [n (%)]		
Influenza A	0 (0.00%)	733 (54.58%)
Subtyping performed	0 (0.00%)	718 (97.95%)
A (H1N1)	0 (0.00%)	682 (94.99%)
A (H3N2)	0 (0.00%)	36 (5.01%)
Subtyping not performed	0 (0.00%)	15 (2.05%)
Influenza B	0 (0.00%)	609 (45.35%)
Lineage testing performed	0 (0.00%)	566 (92.94%)
B/Victoria	0 (0.00%)	561 (99.12%)
B/Yamagata	0 (0.00%)	5 (0.88%)
Lineage testing not performed	0 (0.00%)	42 (6.90%)
Other	0 (0.00%)	1 (0.07%)

[†]Other denotes specimens with coinfections (i.e. one specimen was positive for both influenza A (H1N1) and influenza A (H3N2))

Other Respiratory Viruses

The NREVSS system collects information on a variety of respiratory viruses in addition to influenza including parainfluenza virus, respiratory syncytial virus (RSV), rhinovirus, human metapneumovirus (HMPV), seasonal coronavirus, and respiratory adenovirus. The results for the current week are summarized below.

Table 4: Non-Influenza Respiratory Virus Testing Performed by Texas NREVSS Laboratories for the Current Week

Virus	Number of Laboratories Testing	Tests Performed	Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	9	339	7	2.06%
HMPV	9	339	0	0.00%
Parainfluenza virus	9	339	1	0.29%
Rhino/enterovirus	9	339	19	5.60%
RSV ^{†^}	12	367	0	0.00%
Seasonal coronavirus (does not include MERS-CoV or COVID-19)	7	306	2	0.65%

[†]RSV tests displayed in the table are a combination of antigen detection, PCR, and culture tests. Some non-NREVSS reporters also contribute to the RSV data.

[^]Numbers and percentage may differ from the weekly RSV report. The weekly RSV report may be accessed at <https://www.dshs.state.tx.us/RSV/disease/rsv-Data.aspx>.

U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

* Please note, the COVID-19 pandemic is affecting healthcare seeking behavior. The number of persons and their reasons for seeking care in the outpatient and ED settings is changing. These changes impact data from ILINet in ways that are difficult to differentiate from changes in illness levels, therefore ILINet data should be interpreted with caution.

Table 5: Texas ILINet Reporting and Patient Visit Summary for the Current Week

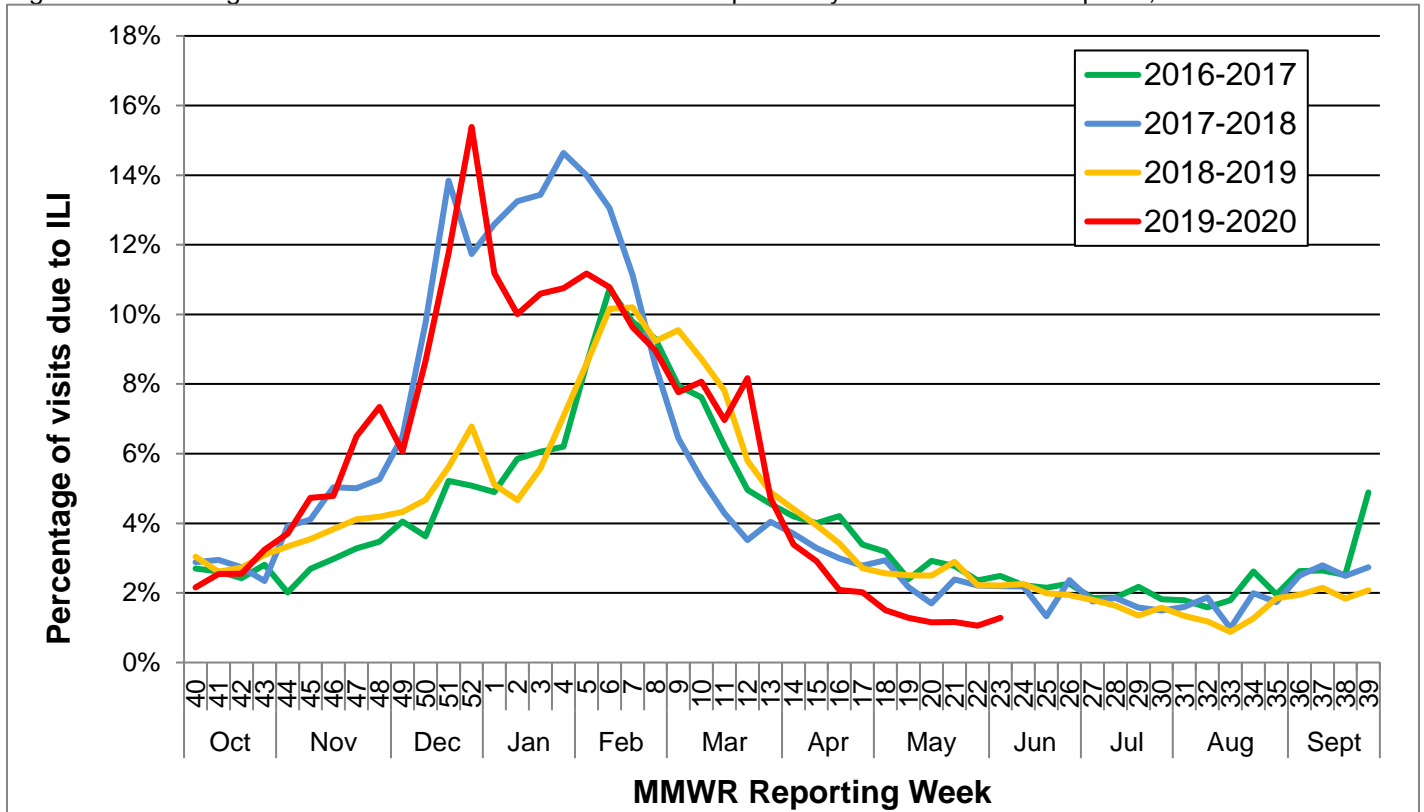
	Week 23
Number of providers reporting	78
Number of providers reporting patient visits	78
Number (%) of providers with at least one ILI case	29 (37.18%)
Percentage of all visits due to ILI	1.28%
Texas ILINet baseline [‡] , 2019-2020	4.76%

[‡]The baseline is the mean percentage of patient visits for ILI during non-influenza weeks for the previous three seasons plus two standard deviations. A "non-influenza week" is defined as a week that accounted for less than 2% of the season's total number of specimens that tested positive for influenza

Table 6: Percentage of Visits for Influenza-like Illness Reported by Texas ILINet Providers (as of 6/11/2020 11:30 AM)

Week	Providers Reporting	Number of ILI Cases by Age Group (Years)					Total ILI (all ages)	Total Patients	ILI
		0-4	5-24	25-49	50-64	65+			
201940	114	156	249	149	60	23	637	29515	2.16%
201941	116	213	314	149	53	30	759	29847	2.54%
201942	119	162	341	191	49	25	768	30084	2.55%
201943	117	218	442	226	52	49	987	30475	3.24%
201944	121	229	506	252	98	39	1124	30361	3.70%
201945	116	320	696	347	93	45	1501	31701	4.73%
201946	111	263	710	352	88	43	1456	30398	4.79%
201947	114	359	1123	442	126	64	2114	32525	6.50%
201948	117	316	780	473	147	67	1783	24299	7.34%
201949	110	303	767	595	165	72	1902	31345	6.07%
201950	98	329	1063	526	143	63	2124	24503	8.67%
201951	93	415	1274	640	195	81	2605	22144	11.76%
201952	90	275	1013	739	198	118	2343	15230	15.38%
202001	114	292	794	1229	420	198	2933	26226	11.18%
202002	117	278	982	1248	375	126	3009	30060	10.01%
202003	114	287	1315	1063	341	94	3100	29245	10.60%
202004	113	363	1537	1124	291	114	3429	31899	10.75%
202005	116	372	1753	1176	373	125	3799	33993	11.18%
202006	117	263	1438	970	312	107	3090	28662	10.78%
202007	114	262	1323	1053	337	101	3076	31943	9.63%
202008	115	262	1239	974	308	107	2890	32229	8.97%
202009	111	272	1015	806	270	91	2454	31598	7.77%
202010	106	233	994	819	232	137	2415	29940	8.07%
202011	108	205	637	663	199	85	1789	25676	6.97%
202012	101	184	679	741	241	73	1918	23472	8.17%
202013	101	109	195	298	96	29	727	15398	4.72%
202014	93	53	77	179	64	25	398	11758	3.38%
202015	100	40	88	135	52	23	338	11625	2.91%
202016	95	25	69	91	31	12	228	10935	2.09%
202017	93	41	47	88	29	11	216	10692	2.02%
202018	78	25	22	41	29	11	128	8496	1.51%
202019	91	19	42	57	31	7	156	12120	1.29%
202020	92	20	35	44	34	20	153	13248	1.15%
202021	86	20	35	53	24	18	150	12880	1.16%
202022	78	10	37	53	19	4	123	11620	1.06%
202023	78	14	45	61	21	10	151	11756	1.28%

Figure 1: Percentage of Visits Due to Influenza-like Illness Reported by Texas ILINet Participants, 2016–2020 Seasons



Reports from Health Service Regions

Reports were received from two Health Service Regions (HSRs) during week 23.

Table 7: Influenza Activity Compared to week 22 by Health Service Region (HSR)

Influenza Activity Comparison	Health Service Region (HSR)
Increased	7
Same	
Decreased	1
Unsure	

Variant Influenza Viruses

No variant or novel influenza viruses have been detected in Texas during the 2019-2020 season.

Institutional Outbreaks and School Closures

No institutional outbreaks or school closures were reported in week 23 during the 2019-2020 season.

P&I Mortality Surveillance Data

*Deaths due to COVID-19 may be classified as pneumonia deaths or influenza deaths (deaths due to “flu” or “flu-like illness”) in the absence of positive SARS-CoV-2 test results. Records with ICD-10 code U07.1 (death associated with COVID-19 infection) have been removed.

Pneumonia and influenza (P&I) death data are obtained from death certificates of Texas residents whose underlying or contributing cause(s) of death is reported as pneumonia or influenza. P&I deaths are identified based on ICD-10 multiple cause of death codes. P&I deaths are based on ICD-10 pneumonia and influenza mortality codes.

Eight thousand one hundred fifty-seven P&I deaths have been reported in Texas during the 2019-2020 influenza season.

Table 8: Texas P&I Deaths Occurring Sept. 29, 2019 – June 02, 2020* by Age

Age Category (years)	Number of P&I Deaths ⁺	Mortality Rate (per 100,000)
0 - 4	26	1.19
5 - 17	34	0.61
18 - 49	566	4.19
50 - 64	1520	28.84
65 +	6011	149.75
Overall	8157	26.71

*NOTE: Data are provisional and subject to change, errors, and duplicates

⁺ If the cell count is less than 10, the number of P&I deaths is suppressed and <10 is written in the cell.

Table 9: Texas P&I Deaths Occurring Sept. 29, 2019 – June 02, 2020* by Health Service Region (HSR)

HSR	Number of P&I Deaths	Mortality Rate (per 100,000)
1	353	37.46
2/3	2349	26.57
4/5N	660	39.85
6/5S	1834	22.90
7	935	24.88
8	865	27.47
9/10	456	28.10
11	701	27.38
Unknown	<10	n/a
Overall	8157	26.71

*NOTE: Data are provisional and subject to change, errors, and duplicates

Influenza-Associated Pediatric Mortality

No influenza-associated pediatric deaths were reported during week 23.

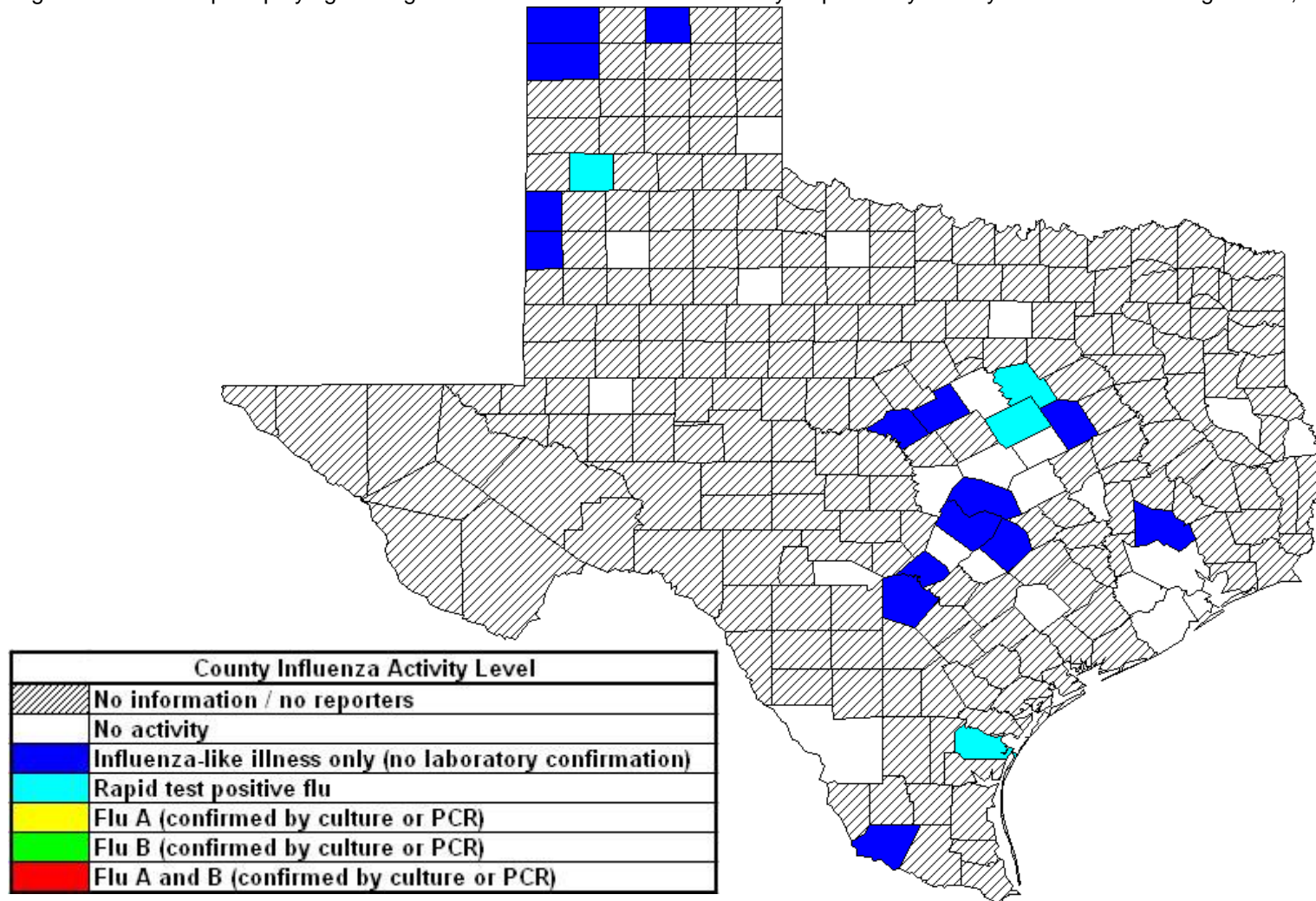
Twenty influenza-associated pediatric mortalities have been reported in Texas during the 2019-2020 influenza season. Cases of influenza-associated pediatric mortality (children <18 years of age) are reportable year-round by law in Texas.

Table 10: Influenza-Associated Pediatric Deaths Reported in Texas during the 2019-2020 Season

Month of Pediatric Death	Influenza A (H1N1)	Influenza A (H3N2)	Influenza A (Not Subtyped)	Influenza B	Influenza, Not Typed / Not Differentiated	Influenza virus co-infection: A (not subtyped) and B	Total, All Influenza Types / Subtypes
2019							
October	0	0	0	0	0	0	0
November	3	0	1	2	0	0	6
December	1	0	1	4	0	0	6
2020							
January	2	0	0	4	0	0	6
February	0	0	0	1	0	0	1
March	1	0	0	0	0	0	1
April	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0
Total	7	0	2	11	0	0	20

Statewide Influenza Activity Map

Figure 2: Texas Map Displaying the Highest Level of Influenza or ILI Activity Reported by County for the Week Ending June 6, 2020 (MMWR Week 23)



Please note: The majority of influenza cases are not reportable by law in Texas. This map contains data from sentinel sites and only displays influenza and ILI cases that were reported to public health. Positive laboratory results are reported according to specimen collection date, or date received in the laboratory if the former is unknown.

Texas Influenza Surveillance Components and Measures

Activity codes (see <http://www.cdc.gov/flu/weekly/overview.htm>)

Statewide influenza activity level

A code reported weekly by states and territories to CDC indicating the geographic spread of influenza in the state. Levels are no activity, sporadic, local, regional, and widespread.

ILINet Activity Indicator

A statewide level of influenza-like illness intensity (on a scale of 1-10, with 1 being the lowest level) assigned to each state weekly by CDC based on data reported through ILINet.

Morbidity

Novel/variant influenza

Thorough investigations are performed on all cases of novel/variant influenza. *This condition is reportable by law in Texas.*

Texas ILINet

Providers voluntarily report weekly to CDC's ILINet system on the number of outpatient visits for ILI and total outpatient visits. Providers may submit up to 5 specimens per month for influenza testing. See <http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/ILINet/> for information on how to become an ILINet provider.

ILI activity

Non-ILINet providers report ILI or influenza data weekly to local or regional health departments.

Outbreaks

Healthcare, schools, childcare, and correctional facilities report ILI and influenza outbreaks to health departments in Texas. *This condition is reportable by law in Texas.*

Mortality

Pneumonia and Influenza (P&I) Mortality Surveillance

The DSHS Vital Statistics Unit collects death certificate information for all deaths on Texas residents from various partners such as funeral homes and local registrars around the state. The death certificates are then sent to the National Center for Health Statistics (NCHS) where the cause of death and underlying causes of death on the death certificates are coded with ICD-10 mortality codes. Once death certificates are coded, the information is sent back to DSHS Center for Health Statistics (CHS). CHS produces a Weekly Pneumonia and Influenza (P&I) Death Report and sends it to the State Influenza Surveillance Coordinator for inclusion in the Texas Weekly Flu Report. P&I deaths are identified based on ICD-10 multiple cause of death codes, and in particular, pneumonia and influenza mortality codes. Delays inherent in death reporting and coding practices may cause the number of reported P&I deaths to vary considerably each week.

Influenza-associated pediatric deaths

Deaths that are associated with influenza in children < 18 years of age are reported to health departments in Texas. *This condition is reportable by law in Texas.* <http://www.dshs.state.tx.us/idcu/disease/IAPM/>

Laboratory

DSHS Austin laboratory

Providers voluntarily submit specimens to the DSHS Austin laboratory for influenza PCR testing throughout the season. Providers sign up for this program through their local health departments.

Laboratory Response Network (LRN) laboratories

Providers voluntarily submit specimens to one of the 9 Texas LRNs for influenza PCR testing throughout the season. Providers sign up for this program through their local health departments.

NREVSS

Laboratories voluntarily report influenza and other respiratory virus data weekly through the CDC's online NREVSS reporting system. **Laboratories sign up for this program by contacting DSHS.** <http://www.cdc.gov/surveillance/nrevss/>

Recommended Resources

Texas Department of State Health Services

DSHS influenza page: <http://www.texasflu.org/>

Influenza surveillance data and reports: <http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/>

Map of Texas Health Service Regions: <http://www.dshs.state.tx.us/regions/state.shtm>

Centers for Disease Control and Prevention

National FluView weekly flu report: <http://www.cdc.gov/flu/weekly/>

Variant influenza viruses: <http://www.cdc.gov/flu/swineflu/variant.htm>

Avian influenza viruses: <http://www.cdc.gov/flu/avianflu/index.htm>

Swine influenza viruses: <http://www.cdc.gov/flu/swineflu/index.htm>

Infection Control in Healthcare Facilities: <http://www.cdc.gov/flu/professionals/infectioncontrol/>

Seasonal Flu Information for Schools and Childcare Providers: <http://www.cdc.gov/flu/school/index.htm>

World Health Organization

Influenza page: <http://www.who.int/topics/influenza/en/>

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