



Iowa Influenza Surveillance Network (IISN)
 Influenza-like Illness (ILI) and Other Respiratory Viruses
Weekly Activity Report
 For the week ending December 18, 2021 - MMWR Week 50



All data presented in this report are provisional and may change as additional reports are received

Quick Stats for Week 50				
Predominant Flu at SHL A(H3)	Lab Survey Flu Positive % Antigen 24.6% Molecular 5.1%	Hospitalization Rate per 10,000 14.94	Outpatient ILI % 3.39%	Cumulative Flu Deaths All Ages 3
Predominant Nonflu Rhinovirus / Enterovirus 16.3% +	Schools Reporting 10% Illness 41	Weekly School Illness % 3.8%	Long Term Care Outbreaks 0	Cumulative Pediatric Flu Deaths 0

Flu Death Note: Deaths are considered influenza-associated when influenza is listed on the death certificate. This is an underestimate of influenza-related deaths. Cumulative mortality totals are from 9/27/2020 to the current week.

Iowa Statewide Activity Summary

Overall Influenza Activity: Moderate

Flu tests at SHL: The State Hygienic Laboratory reported **22** influenza positive specimens from specimens submitted.

Antigen Tests: There were **238** of **966 (24.6%)** influenza antigen tests reported as positive on the Iowa respiratory virus survey.

Molecular Tests: There were **426** of **8,365 (5.1%)** influenza molecular tests reported as positive on the Iowa respiratory virus survey.

Flu Hospitalizations: **8** influenza-related hospitalizations were reported from sentinel sites.

Outpatient Influenza-like-illness (ILI): The proportion of outpatient visits due to ILI was **3.39%**, which is **above** the regional baseline of 1.7%.

Flu Deaths: One influenza-associated deaths was reported this week.

Schools Reporting 10% Illness: **41** schools reported 10% of students absent due to illness at least once this week.

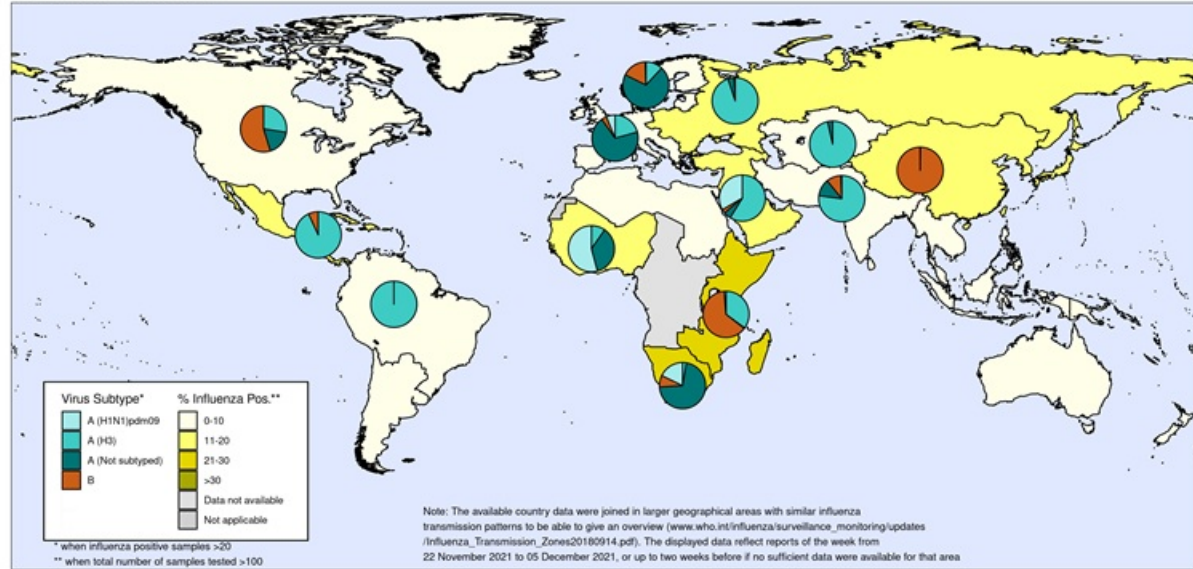
Outbreaks: No long-term care influenza outbreaks were reported.

Rhinovirus/Enterovirus PCR was the most frequently reported non-influenza and non-COVID 19 respiratory testing target reported on the Iowa respiratory virus testing survey this week with **368** of **2,253** tests positive (**16.3%**).

International Influenza Activity Summary - WHO

Percentage of respiratory specimens that tested positive for influenza
By influenza transmission zone

Map generated on 17 December 2021



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

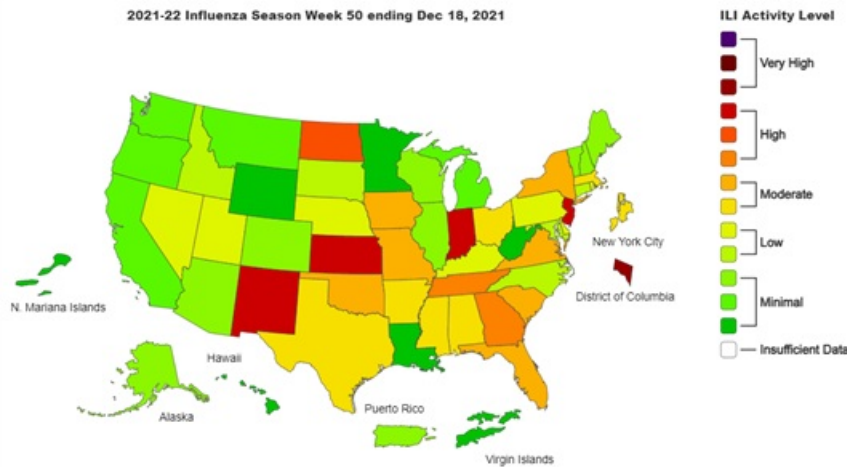
Data source: Global Influenza Surveillance and Response System (GISRS), FluNet (www.who.int/flu-net)
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Visit <https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update> for more information.

National Influenza Like Illness (ILI) Activity - CDC



This map shows influenza-like illness, which is determined by symptoms such as fever, cough, and sore throat that can be caused by a number of pathogens in addition to influenza (e.g., COVID-19). Detailed information can be found online at www.cdc.gov/flu/weekly/.

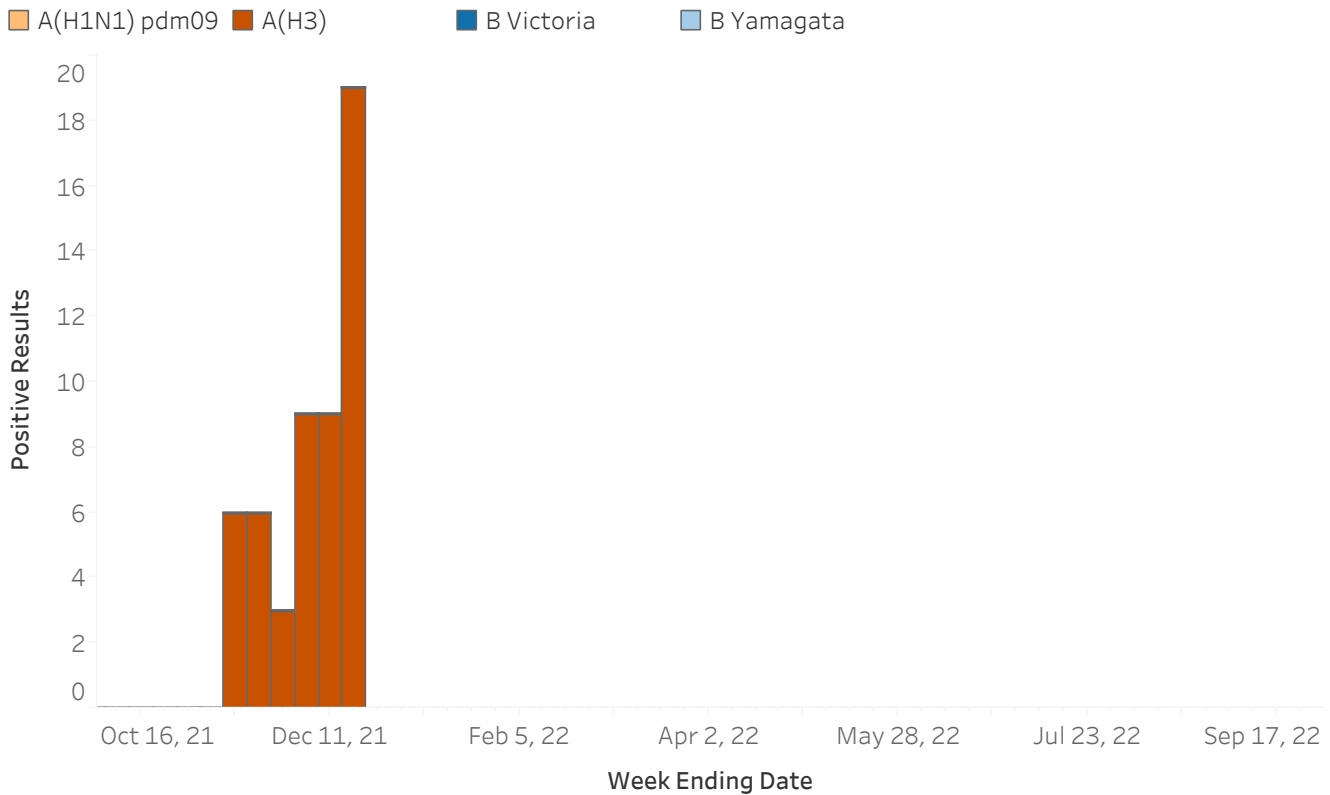
Influenza Testing at the State Hygienic Laboratory at the University of Iowa (SHL)

Cumulative Influenza Viruses Detected by SHL by Age Group (10/3/2021 - Current Week)

Age Group	Influenza A				Total	Influenza B			Total
	A(H1N1) pdm09	A(H3)	A not subtyped	A Variant		B Victoria	B Yamagata	B not subtyped	
0-4	0	2	1	0	3	0	0	0	0
5-17	0	9	1	0	10	0	0	0	0
18-24	0	29	1	0	30	0	0	0	0
25-49	0	7	1	0	8	0	0	0	0
50-64	0	4	0	0	4	0	0	0	0
65+	0	1	0	0	1	0	0	0	0
Total	0	52	4	0	56	0	0	0	0

Table Note: Cell counts of three or less are sometimes suppressed to protect confidentiality. Totals by age may not add up to totals by subtype/lineage due to missing age information. Only cases of Iowa residents are included. Specimens listed as “not subtyped” may be pending or were not able to be subtyped due to weak positive lab results. This can be due to poor collection, timing of collection or stage of infection.

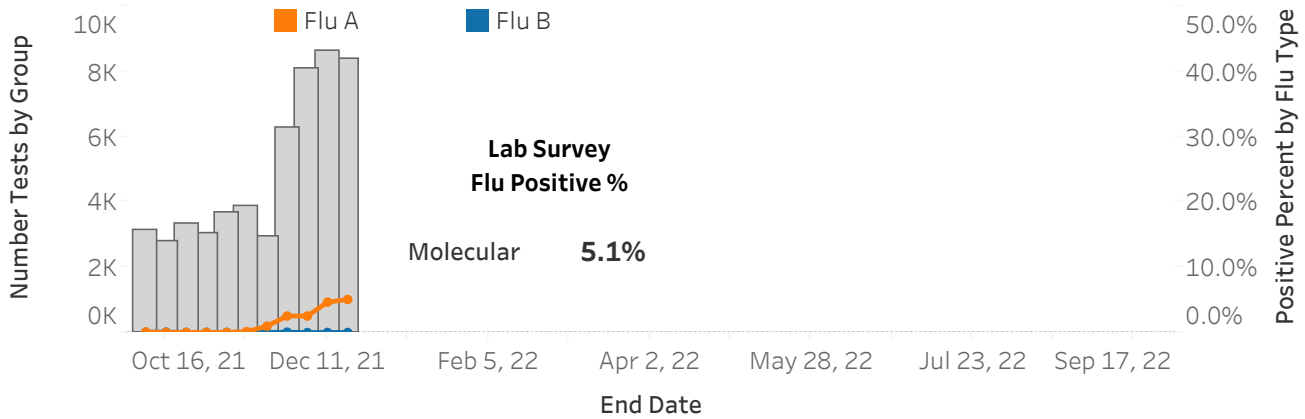
Influenza Viruses Detected by SHL by Week (10/3/21 - Current Week)



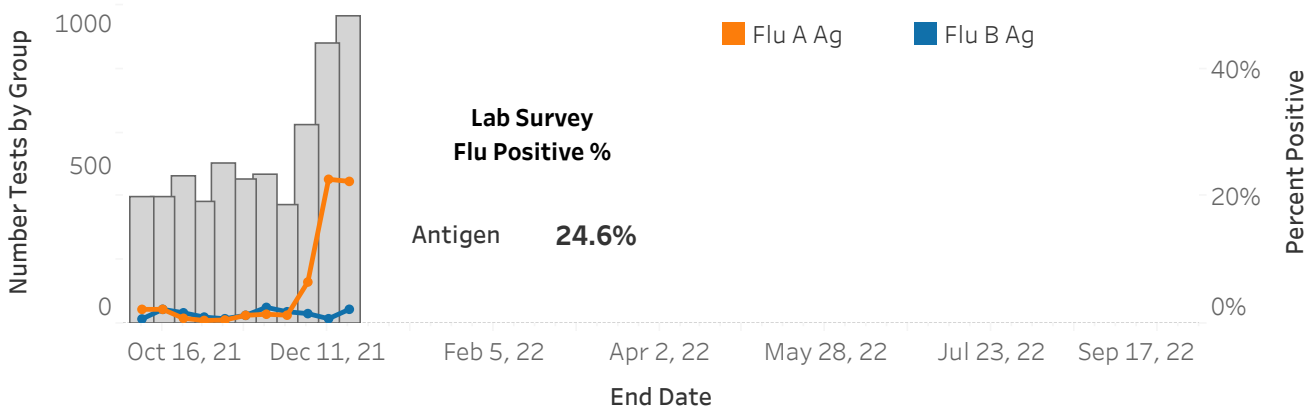
Graph Note: Only viruses that have been assigned a subtype or lineage are shown.

SHL Flu Testing Note: The State Hygienic Laboratory (SHL) is the primary laboratory in Iowa characterizing specimens for influenza surveillance. SHL reports the number of tests performed and the type and subtype/lineage of positive tests to the influenza surveillance network daily. SHL also sends a portion of specimens to CDC for further characterization.

Number of Influenza Molecular Tests and Positive Percentage



Number of Influenza Antigen Tests and Positive Percentage



Iowa Respiratory Survey - Influenza

Flu Tests and Positivity by Region - Current Week

Flu Region	Antigen				Molecular			
	Flu A		Flu B		Flu A		Flu B	
	Number Positives	Positive Percent by..	Number Positives	Positive Percent by..	Number Positives	Positive Percent by..	Number Positives	Positive Percent by..
1-C	170	29.5%	16	2.8%	52	7.8%	0	0.0%
2-NE	1	3.3%	0	0.0%	37	5.2%	0	0.0%
3-NW	37	11.7%	5	1.6%	27	16.1%	0	0.0%
4-SW	0		0		2	2.6%	0	0.0%
5-SE	8	24.2%	0	0.0%	4	25.0%	0	0.0%
6-E	0	0.0%	1	9.1%	303	4.5%	1	0.0%
Total	216	22.4%	22	2.3%	425	5.1%	1	0.0%

Table Note: Only tests with at least one positive this week are shown.

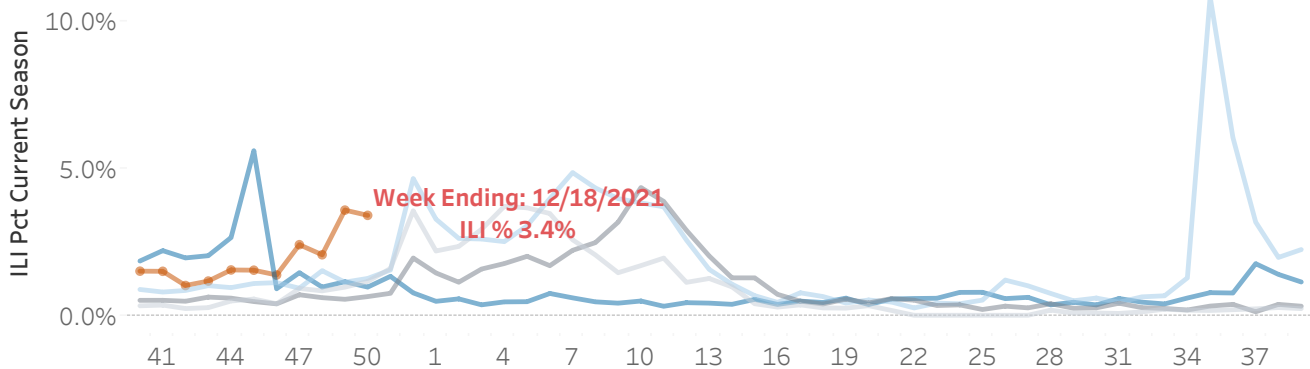
Respiratory Survey Note: IDPH and SHL run a weekly web-based survey program where laboratorians report the number of influenza and respiratory syncytial virus (RSV) rapid tests performed and the number of tests positive. Facilities reported the total number of tests and positive results, not individual-level information.

Outpatient Health Care Provider Surveillance Program (ILINet)

Percent Of Outpatient Visits Attributed to Influenza-like Illness (ILI) as Reported by ILINet Sites

2017-18 2018-19 2019-20 2020-21 2021-22

ILI by Season



ILI Recent Weeks

MMWR Week	End Date	Age 0-4	Age 5-24	Age 25-49	Age 50-64	Age 65 and older	Total ILI	ILI Pct
48	12/4/2021	19	60	27	21	16	143	2.06%
49	12/11/2021	32	127	46	11	19	235	3.57%
50	12/18/2021	21	69	32	11	13	146	3.39%

Outpatient ILI Note: Outpatient health care providers who participate in the ILINet (a national influenza surveillance program) report the number of patients seen with influenza-like illness and the total number of patient visits each week. This system is a key part of Iowa’s influenza surveillance. Iowa health care providers interested in joining this surveillance program should contact Andy Weigel at 515-322-1937 or andy.weigel@idph.iowa.gov for more information.

ILI Definition Note: The ILI Definition has changed for 2021-22 so that persons with ILI symptoms (cough, sore throat, fever) will be counted even if positive for other respiratory illness (e.g., COVID-19) which makes comparison across seasons difficult.

Iowa Department of Public Health Data Tracking Portal - Flu Vaccine

State of Iowa - 2021-2022

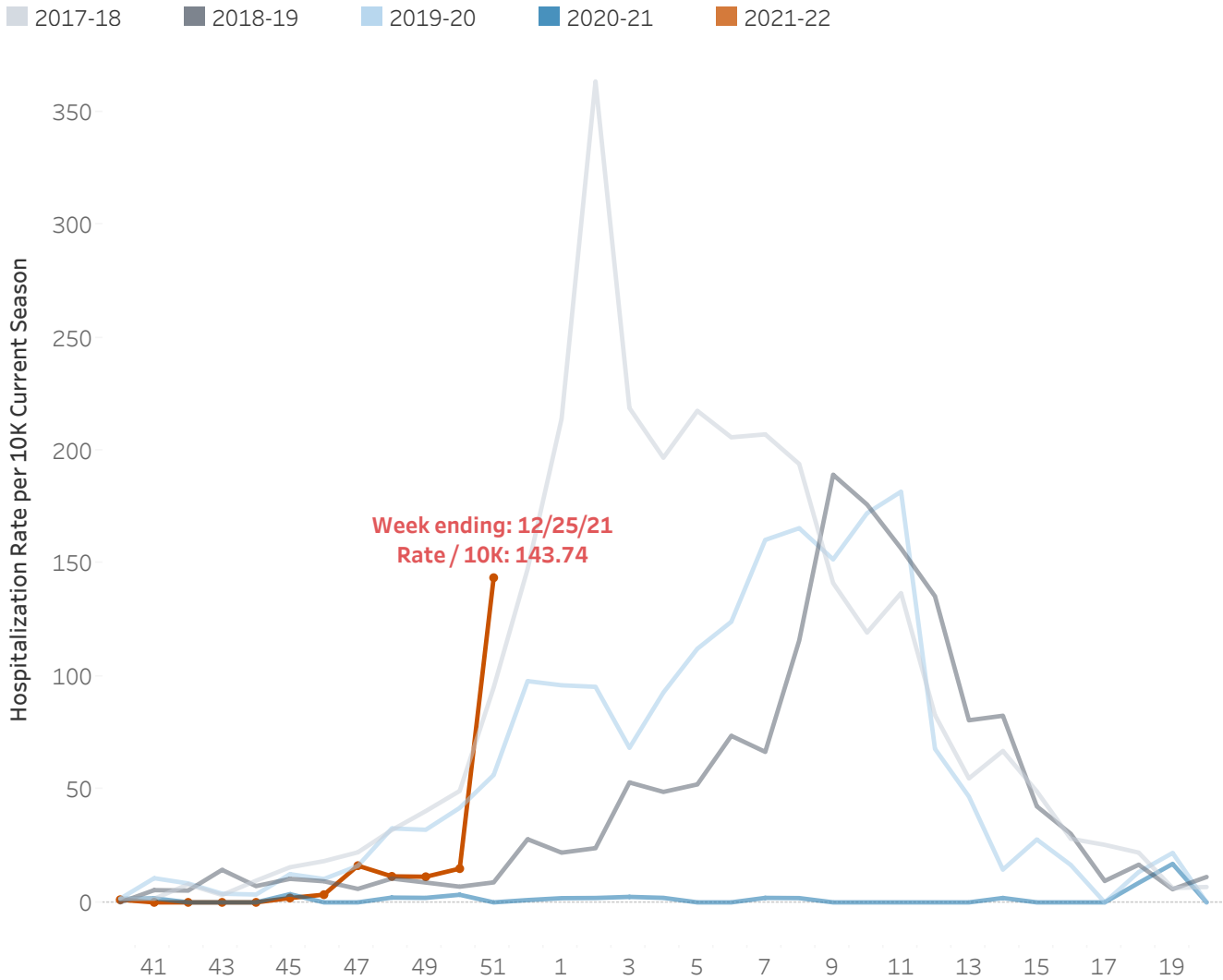
Percent of Population Receiving Flu Vaccine	28.7%
Persons Receiving Flu Vaccine	909,523
Census Population	3,163,561

Updated 12/10/2021

Visit the Iowa Public Health Tracking Portal Influenza Vaccine Data page for details on Iowa Flu Vaccine Coverage: <https://tracking.idph.iowa.gov/Health/Immunization/Influenza-Vaccine/Influenza-Vaccine-Data>

Influenza-associated Hospitalizations

Influenza-associated Hospitalization Rate Reported by Hospital Surveillance Sites - by Season



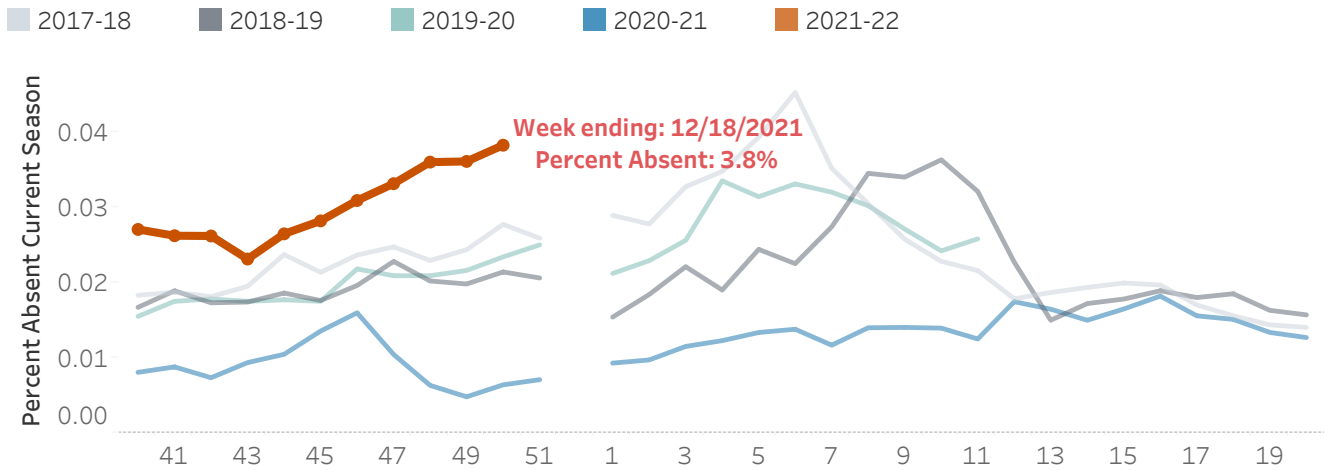
Number of Influenza-Associated Hospitalizations by Age Group

Age Group	Current Week Flu Hospitalizations	Cumulative Flu Hospitalizations
0-4	1	2
5-24	3	15
25-49	0	3
50-64	2	4
65+	2	9
Total	8	33

Hospital Surveillance Note: Sentinel hospitals that participate in IISN voluntarily track and report the number of influenza-associated hospitalizations and the total number of inpatients each week. Iowa hospitals interested in joining this surveillance program should contact Andy Weigel at 515-322-1937 or andy.weigel@idph.iowa.gov for more information.

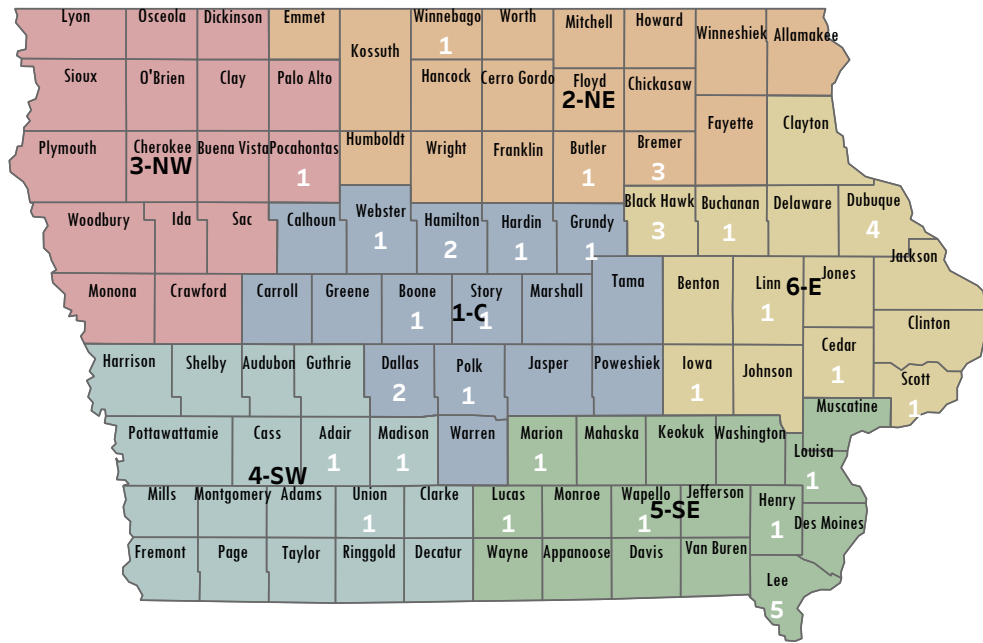
School Illness Surveillance Program

Percent of Enrolled Students Absent Due to Illness Reported by Sentinel Schools



NOTE: School data for week 52-53 are limited due to holiday closings

Counties with 10% School Illness 12/12/2021 - 12/18/2021



School Illness Note: IDPH monitors illnesses in schools from two different types of reporting: 10 percent school absence reports and weekly sentinel illness reporting. Iowa schools (K-12) track and report when the number of students absent with any illness reaches or exceeds 10 percent of total student enrollment. Iowa sentinel schools that participate in IISN voluntarily track and report absence due to all illness and the total enrollment each week.

Iowa Respiratory Virus Survey - Non-influenza

Number of Positive Non-influenza Respiratory Viruses by Pathogen and Week

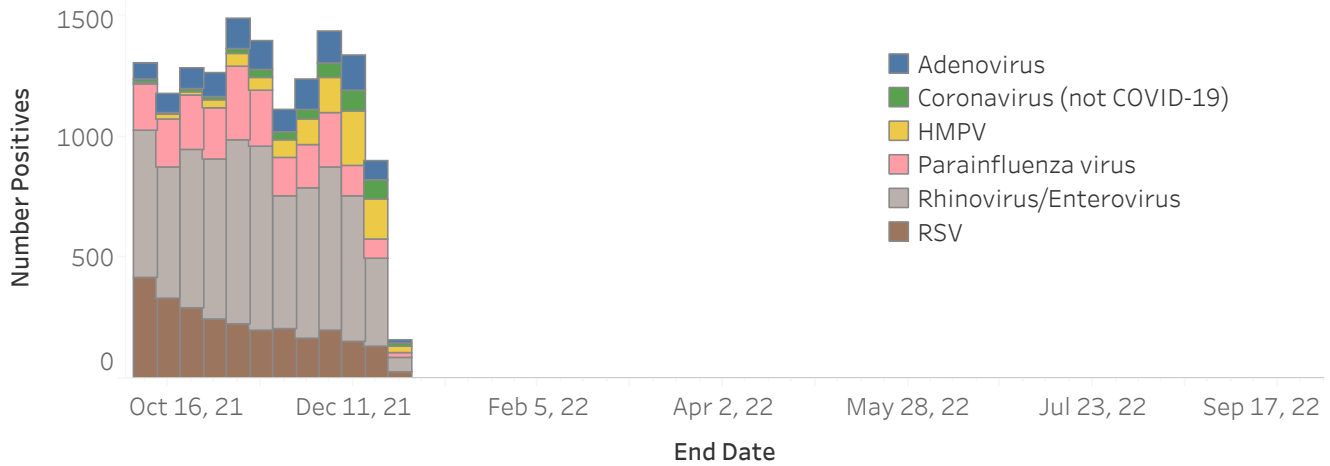


Table Note: Pathogens are grouped together if even if reported to IDPH as separate types or subtypes (e.g., Parainfluenza Viruses 1, 2, 3, and 4). Only pathogens with at least one positive result this season are shown.

Number of Non-influenza Molecular Positive Results for Current Week and Cumulative

Pathogen (group)	Current Week Positives	Cumulative Positives
Rhinovirus/Enterovirus	368	6,791
HMPV	165	886
RSV	130	2,550
Adenovirus	83	1,157
Coronavirus (not COVID-19)	78	392
Parainfluenza virus	77	2,135

Table Note: Only pathogens with at least one positive result are shown.

Respiratory Survey note: IDPH and SHL run a weekly web-based survey program where laboratorians report the number of non-influenza respiratory virus tests performed and the number of positive results. Facilities reported the total number of tests and positive results not individual-level information.