

# Influenza Surveillance Report

Saint Louis County Department of Public Health  
Week Ending 05/21/2023 – Week 20



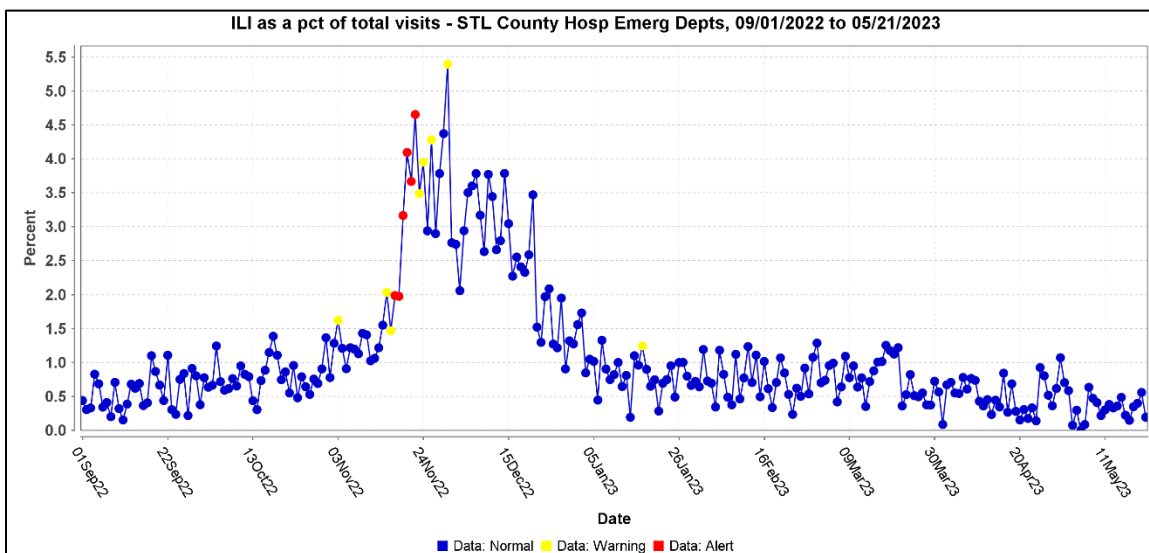
## Summary

- Influenza activity is low in Saint Louis County. The Missouri Department of Health and Senior Services and CDC have not yet released influenza surveillance reports for the week ending 05/21/2023, but we anticipate that they will show that the intensity of influenza activity in Missouri remains sporadic.
- During week 20 a total of 5 laboratory-positive influenza cases (two influenza A and three influenza B) were reported. Three of these cases came from sentinel reporting sites (one influenza A and two influenza B).
- No influenza outbreaks have been reported to Saint Louis County Department of Public Health (DPH).
- This concludes the 2022–2023 influenza surveillance season.

## Influenza Surveillance

The Saint Louis County Department of Public Health (DPH) conducts influenza surveillance using three methods – *passive surveillance*, *active surveillance*, and *syndromic surveillance*. Each surveillance method contributes unique information, allowing DPH to gain a fuller picture of influenza activity in Saint Louis County. Although influenza illness occurs year-round, DPH’s seasonal influenza reporting begins in week 40 of one year (e.g., 2022) and continues through week 20 of the following year (e.g., 2023) in order to capture data throughout a typical “flu season.” For additional information on the three types of influenza surveillance, please see the notes at the end of the report.

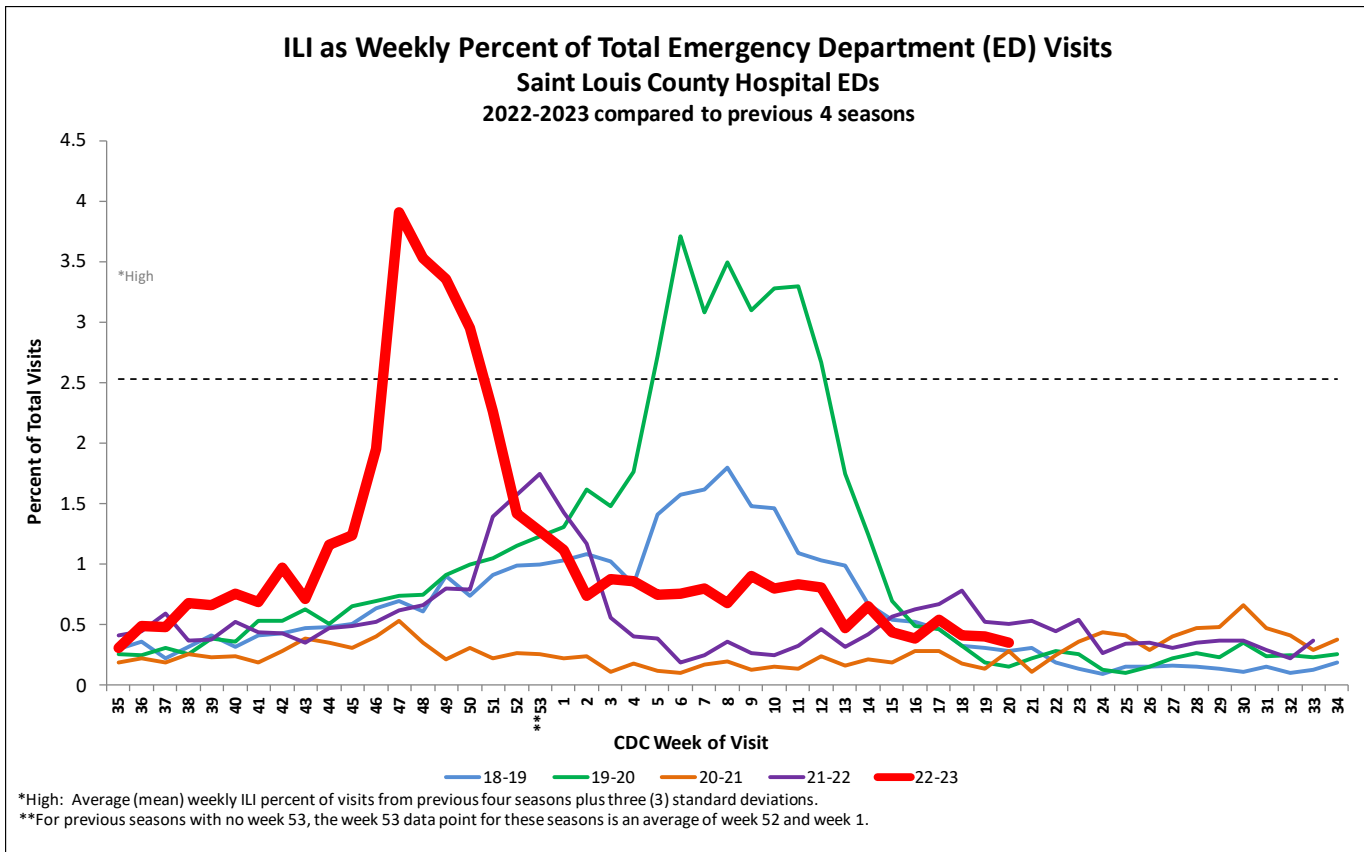
## Syndromic Surveillance for Influenza-Like-Illness (ILI)



As determined by ESSENCE, ILI accounted for 0.15% to 0.56% of daily visits to Saint Louis County hospital emergency departments (EDs) during the week ending 05/21/2023. The number of visits to local hospital EDs for ILI ranged from two to seven per day during the week ending 05/21/2023.

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ILI as a weekly percentage of all visits in Saint Louis County hospital EDs was 0.35%, compared to 0.52% in 2022 and 0.28% in 2021, for week 20.

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Saint Louis County Department of Public Health, Week Ending 05/21/2023



## Active Influenza Surveillance

Surveillance sites reported one case of influenza A and two cases of influenza B for the week ending 05/21/2023. Influenza A accounted for 33.3% of influenza cases (vs. 66.7% for influenza B) for the week ending 05/21/2023 and 55.6% of cases for the week ending 05/14/2023. Overall for the 2022-2023 influenza season, influenza A has accounted for 98.4% of influenza cases.

## Influenza Cases by Report Week and Type

### Saint Louis County Residents Only

For Cases Reported between 10/03/2022 and 05/21/2023

Week Ending	Type A	Type B	Unk Type	Total
10/9/2022	15	2	0	17
10/16/2022	19	3	0	22
10/23/2022	84	11	0	95
10/30/2022	180	3	0	183
11/6/2022	423	23	0	446
11/13/2022	473	7	0	480
11/20/2022	812	4	0	816
11/27/2022	1779	15	0	1794
12/4/2022	1761	3	0	1764
12/11/2022	1275	8	0	1283
12/18/2022	864	7	0	871
12/25/2022	529	3	0	532
1/1/2023	337	6	0	343
1/8/2023	172	4	0	176
1/15/2023	81	1	0	82
1/22/2023	51	1	0	52
1/29/2023	26	2	0	28
2/5/2023	19	3	0	22
2/12/2023	17	6	0	23
2/19/2023	12	3	0	15
2/26/2023	10	4	0	14
3/5/2023	12	3	0	15
3/12/2023	8	2	0	10
3/19/2023	4	1	0	5
3/26/2023	2	2	0	4
4/2/2023	3	0	0	3
4/9/2023	4	3	0	7
4/16/2023	0	2	0	2
4/23/2023	1	1	0	2
4/30/2023	4	2	0	6
5/7/2023	4	1	0	5
5/14/2023	5	4	0	9
5/21/2023	1	2	0	3
<b>Total</b>	<b>8987</b>	<b>142</b>	<b>0</b>	<b>9129</b>

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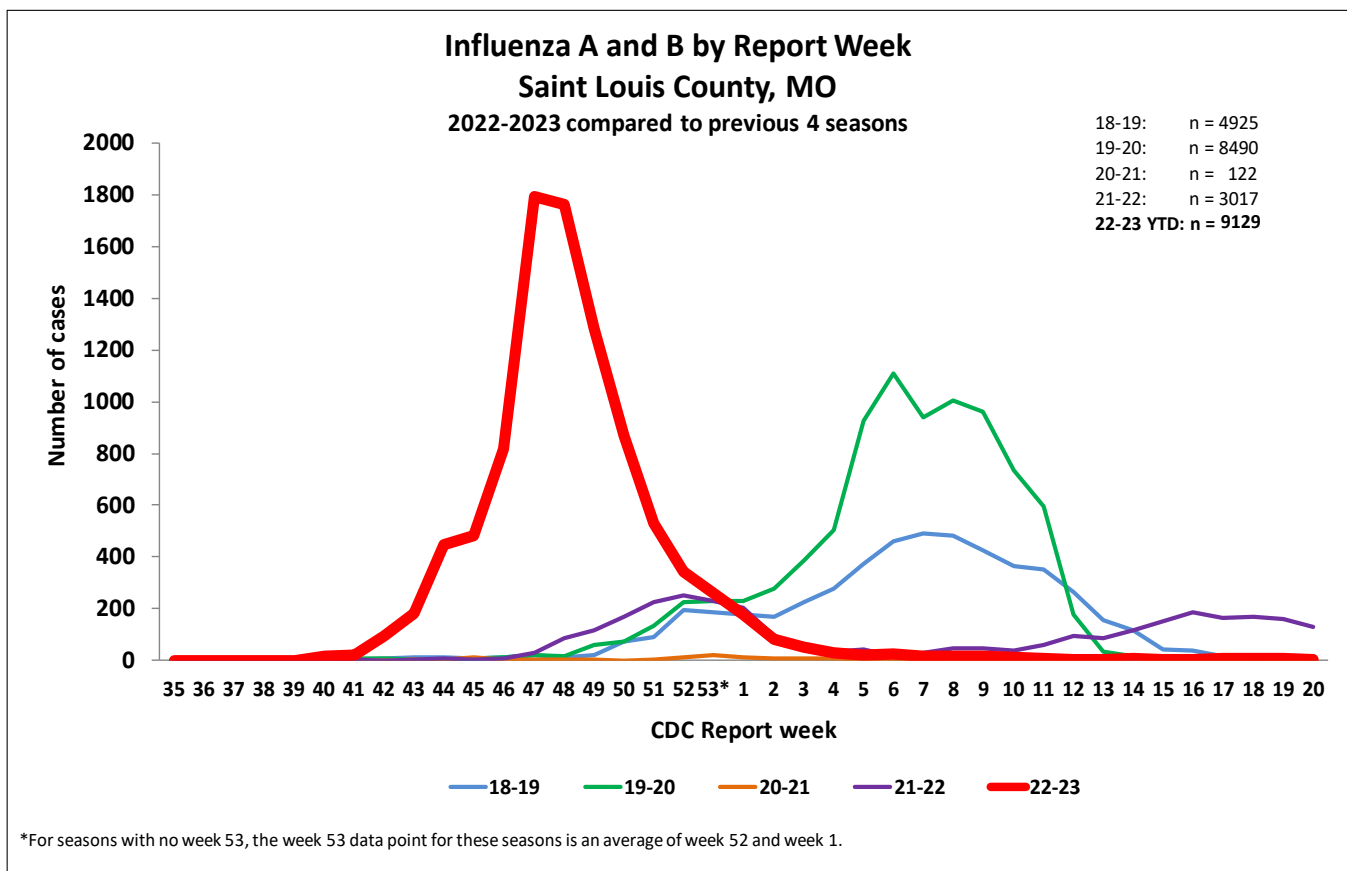
## Influenza Cases by Age and Type

### Saint Louis County Residents Only

For Cases Reported between 10/03/2022 and 05/21/2023

Age Group	Type A n (% of total)	Type B n (% of total)	Unk Type n (% of total)	Total n (%)
00 to <02	408 (4)	2 (0)	0 (0)	410 (4)
02 to 04	801 (9)	14 (0)	0 (0)	815 (9)
05 to 14	2486 (27)	27 (0)	0 (0)	2513 (28)
15 to 24	1189 (13)	19 (0)	0 (0)	1208 (13)
25 to 49	2113 (23)	50 (1)	0 (0)	2163 (24)
50 to 64	920 (10)	18 (0)	0 (0)	938 (10)
65+	1070 (12)	12 (0)	0 (0)	1082 (12)
<b>Total</b>	<b>8987 (98)</b>	<b>142 (2)</b>	<b>0 (0)</b>	<b>9129 (100)</b>

## Influenza A and B Cases by CDC Report Week, 2022-2023 Compared to the Previous Four Seasons

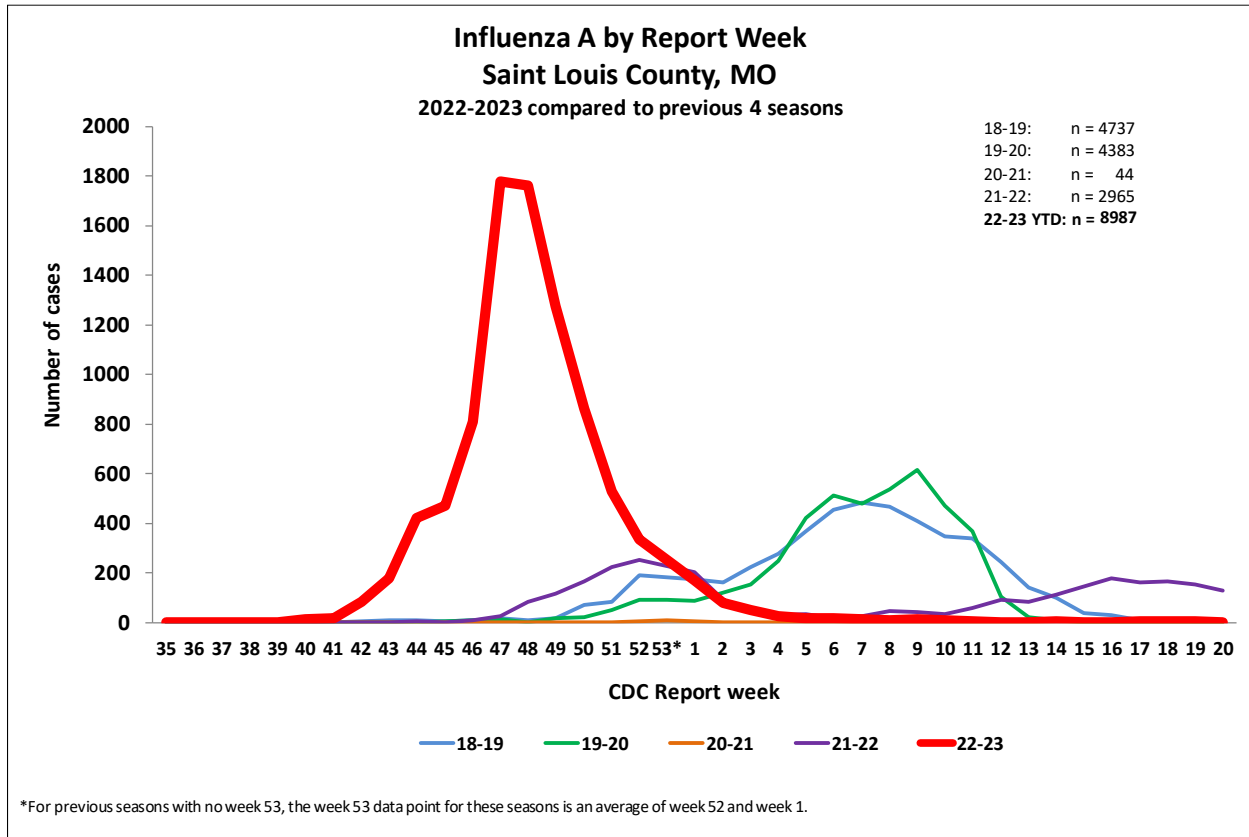


# Influenza Surveillance Report

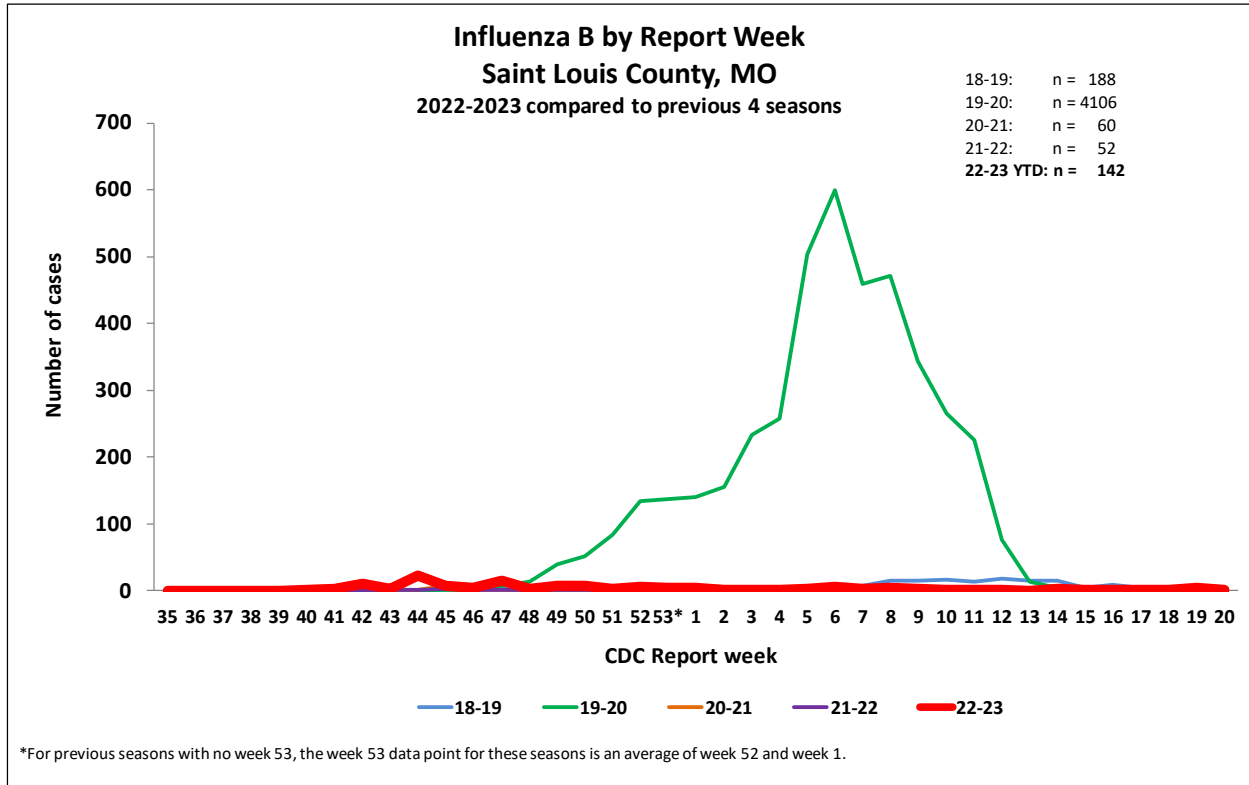
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## Influenza A Cases by CDC Report Week, 2022-2023 Compared to the Previous Four Seasons



## Influenza B Cases by CDC Report Week, 2022-2023 Compared to the Previous Four Seasons

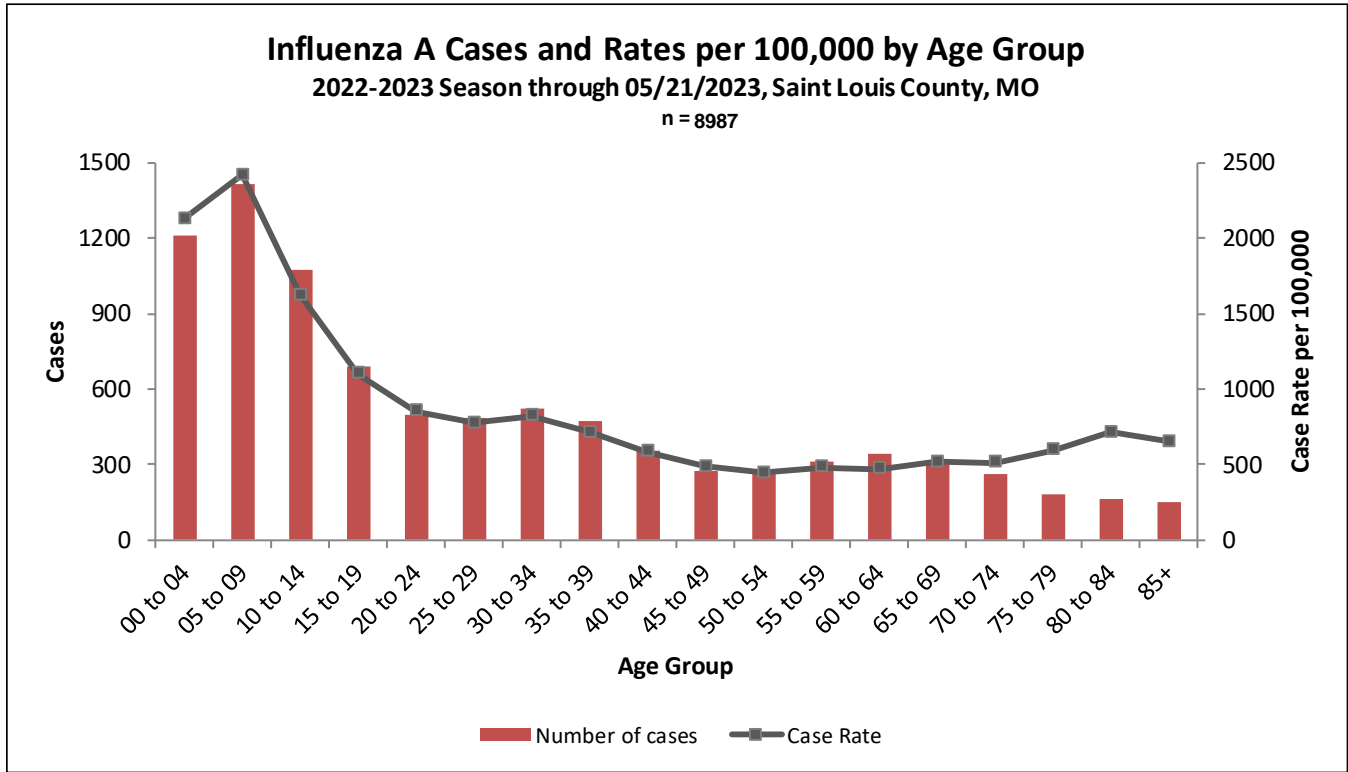


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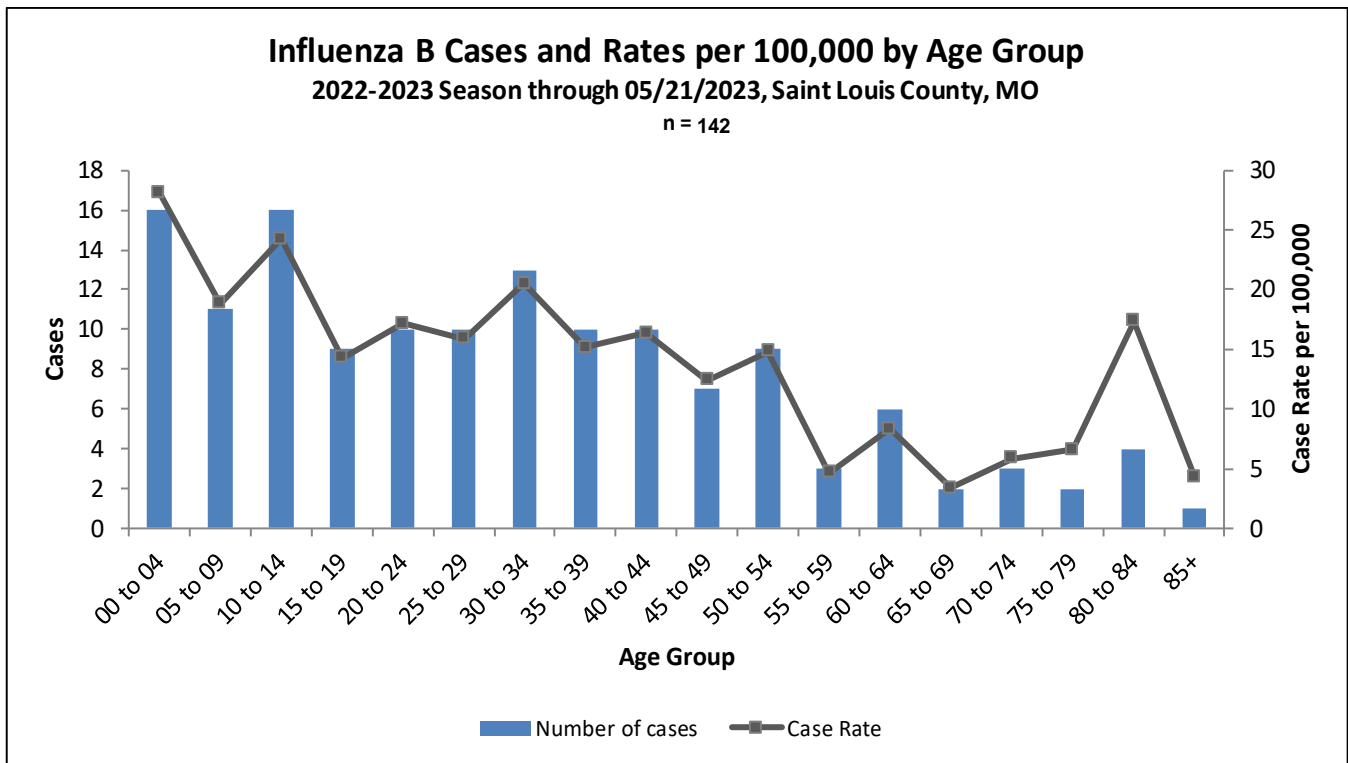
Saint Louis County Department of Public Health, Week Ending 05/21/2023



## Influenza A Cases and Rates by Age Group



## Influenza B Cases and Rates by Age Group

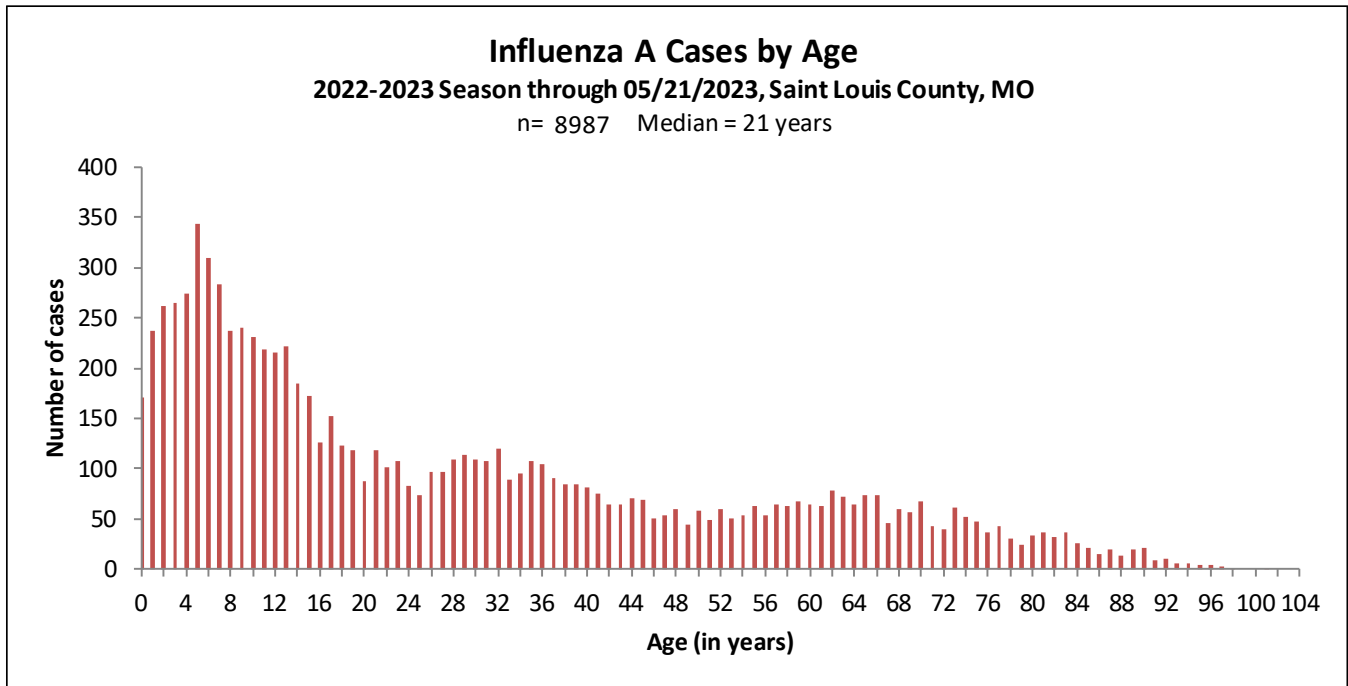


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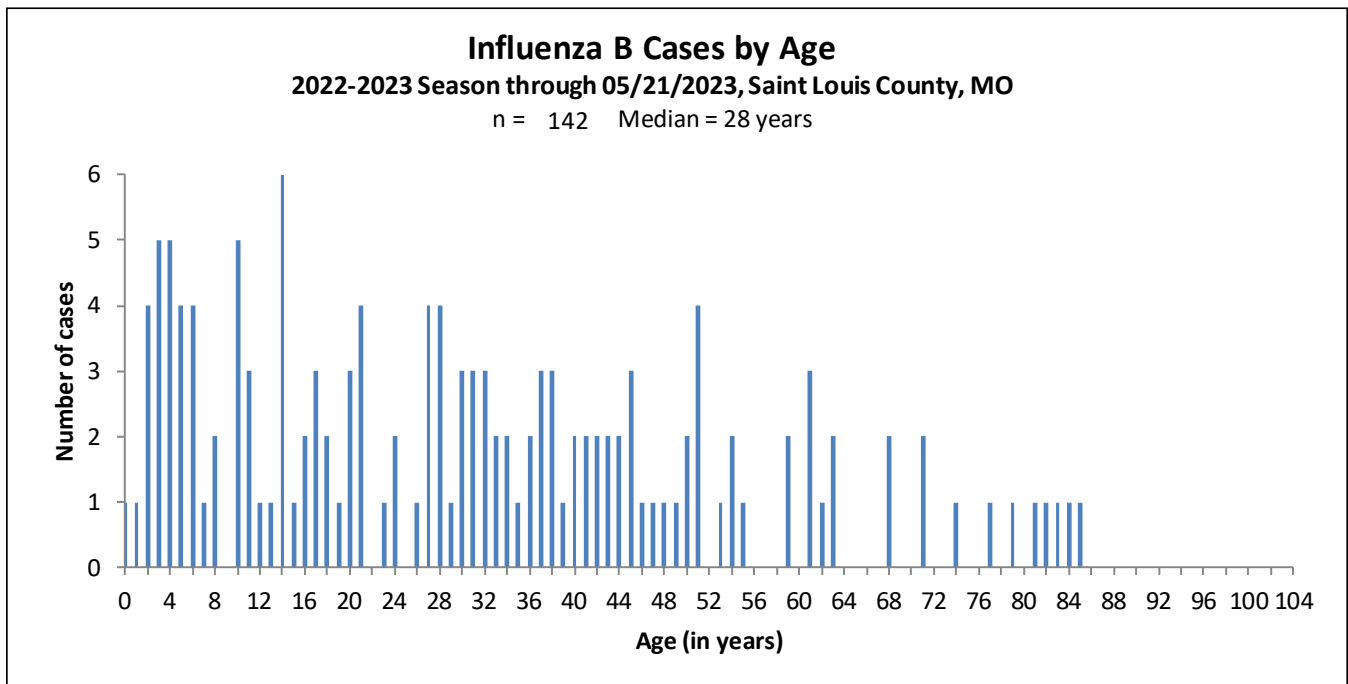
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## Influenza A Cases by Age



## Influenza B Cases by Age



# Influenza Surveillance Report

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## Passive Influenza Surveillance

Two total cases of influenza A and three total cases of influenza B were reported to DPH during the week ending 05/21/2023. Influenza A accounted for 40.0% of total flu cases reported to DPH (vs 60.0% for influenza B) for the week ending 05/21/2023. Influenza A accounted for 50.0% of total influenza cases for the week ending 05/14/2023. Overall for the 2022-2023 influenza season, influenza A has accounted for 96.7% of total influenza cases.

## Influenza by Report Week and Type

### Saint Louis County Residents Only

For Cases Reported between 10/03/2022 and 05/21/2023

Week Ending	Type A	Type B	Unk Type	Total
10/9/2022	17	3	0	20
10/16/2022	34	3	0	37
10/23/2022	99	13	0	112
10/30/2022	261	4	0	265
11/6/2022	570	27	0	597
11/13/2022	674	15	0	689
11/20/2022	1318	19	0	1337
11/27/2022	2631	27	0	2658
12/4/2022	2599	48	0	2647
12/11/2022	1977	35	0	2012
12/18/2022	1438	32	0	1470
12/25/2022	841	24	0	865
1/1/2023	503	30	0	533
1/8/2023	251	26	0	277
1/15/2023	143	27	0	170
1/22/2023	83	6	0	89
1/29/2023	53	11	0	64
2/5/2023	27	7	0	34
2/12/2023	26	16	0	42
2/19/2023	27	14	0	41
2/26/2023	16	17	0	33
3/5/2023	25	10	0	35
3/12/2023	9	12	0	21
3/19/2023	11	12	0	23
3/26/2023	3	4	0	7
4/2/2023	6	2	0	8
4/9/2023	13	5	0	18
4/16/2023	0	2	0	2
4/23/2023	2	3	0	5
4/30/2023	9	3	0	12
5/7/2023	6	2	0	8
5/14/2023	7	7	0	14
5/21/2023	2	3	0	5
<b>Total</b>	<b>13681</b>	<b>469</b>	<b>0</b>	<b>14150</b>



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## Saint Louis County Influenza Outbreaks:

As of the week ending 05/21/2023, there have been no outbreaks of influenza reported to DPH.

## Weekly Virus/Microbiology Update, St. Louis Children's Hospital\*:

<https://slchlabbtestguide.bjc.org/Default.aspx?url=29dcd84b-2932-43f8-9d24-9098a6c663ee>

*\*courtesy of Gregory Storch, MD, and the St. Louis Children's Hospital Clinical Laboratory*

**For additional information on national influenza surveillance, please visit the Centers for Disease Control and Prevention website:**

<https://www.cdc.gov/flu/weekly/>

**For additional information on statewide influenza surveillance, please visit the Missouri Department of Health and Senior Services website:**

<http://health.mo.gov/living/healthcondiseases/communicable/influenza/reports.php>

## Active, Passive, and Syndromic Influenza Surveillance

### Passive surveillance

Influenza is a reportable condition in the state of Missouri; positive influenza tests are reported to DPH year-round. DPH conducts passive influenza surveillance by collecting and aggregating data on all positive influenza tests in Saint Louis County residents. Passive surveillance provides information on the true burden of influenza illness in Saint Louis County, but is limited by variations in testing and reporting practices. If diagnostic tests are not conducted on patients presenting to health care providers with influenza-like-illness, or if test results (e.g., of rapid influenza tests) are not reported to DPH, those persons will not be included in the passive surveillance data. Thus, passive surveillance is likely an underestimate of the true burden of influenza illness in Saint Louis County.

### Active surveillance

DPH conducts active influenza surveillance through a network of sentinel providers. This network is geographically distributed throughout the county, comprised of a wide range of care providers, and designed to capture a representative sample of provider types. Although active influenza surveillance does not capture the true magnitude of disease burden, it allows for year-to-year comparisons of influenza data. DPH can then assess trends in influenza data, as well as the relative magnitude of disease burden with respect to previous influenza seasons. Further, DPH works closely with sentinel sites throughout the influenza season, making the active surveillance data less susceptible to bias arising from testing or reporting variation. Because of these advantages, active surveillance using a network of sentinel providers is the primary method of influenza surveillance utilized by DPH.

### Syndromic surveillance

DPH uses the ESSENCE system to conduct syndromic surveillance for ILI at Saint Louis County hospital emergency departments (EDs). ESSENCE captures data on all ED visits in persons with chief complaints (rather than final diagnoses or positive laboratory tests) of ILI. ILI chief complaints are those which include the word "influenza" or those that the ESSENCE system parses to [fever and (cough or sore throat)]. The syndromic surveillance data presented above include all visits for ILI (regardless of county of residence) to the ten Saint Louis County hospital EDs that contribute data to the ESSENCE system. Data from private physicians, clinics, or urgent care centers are not included in ESSENCE. Syndromic surveillance contributes to our understanding of the burden of influenza experienced by the health care system, as well as demonstrating the relative impact over time of influenza with respect to other illnesses.