

# Influenza Surveillance Report

Saint Louis County Department of Public Health  
Week Ending 04/28/2024 – Week 17



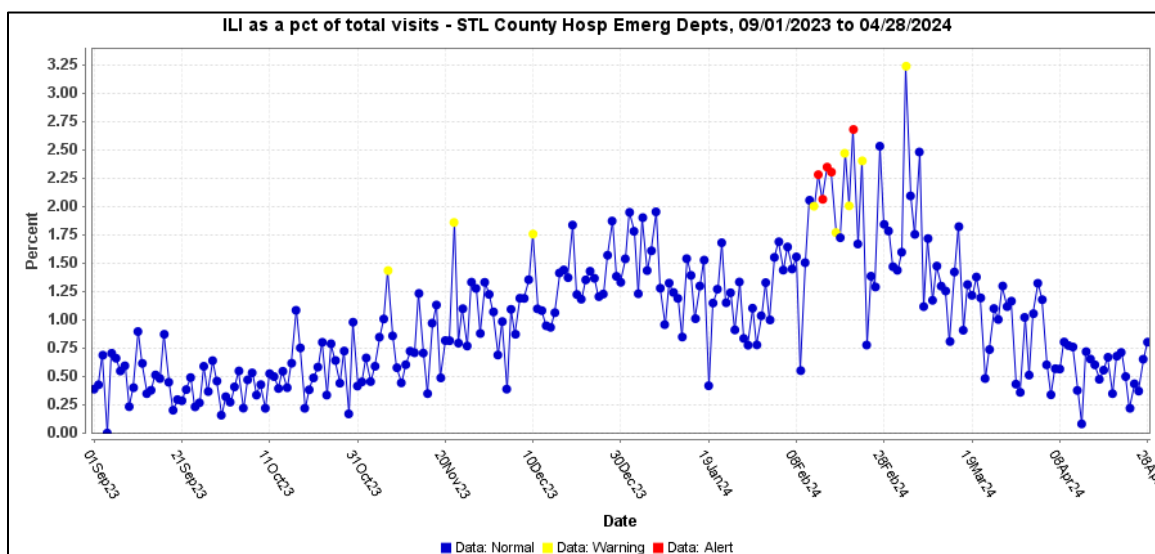
## Summary

- Influenza activity is declining in Saint Louis County. The estimated influenza activity for Saint Louis County and the state of Missouri is low.
- During week 17 a total of 96 laboratory-positive influenza cases (64 influenza A and 32 influenza B) were reported. Fifty-two of those cases came from sentinel reporting sites (32 influenza A and 20 influenza B).
- No influenza outbreaks have been reported to Saint Louis County Department of Public Health (DPH).

## 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., 2023) and continues through week 20 of the following year (e.g., 2024) 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.

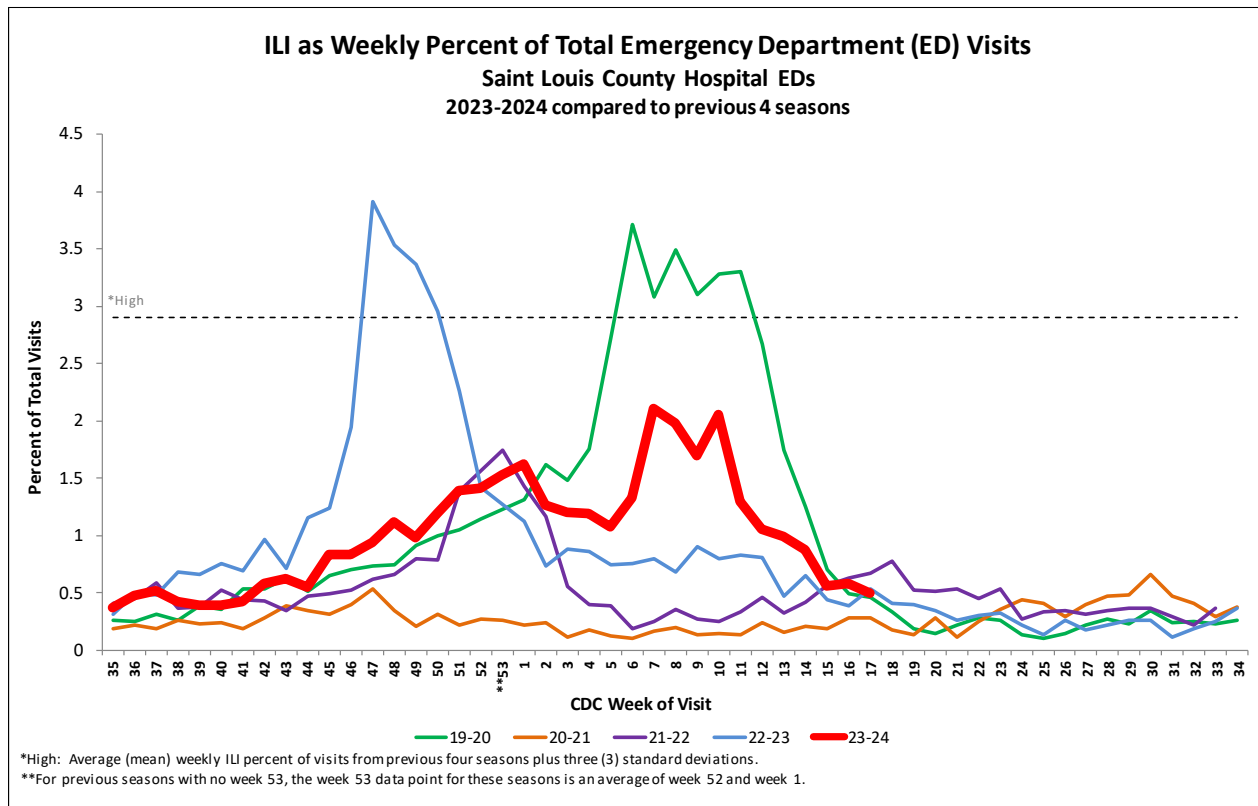
## Syndromic Surveillance for Influenza-Like-Illness (ILI)



As determined by ESSENCE, ILI accounted for 0.22% to 0.79% of daily visits to Saint Louis County hospital emergency departments (EDs) during the week ending 04/28/2024. The number of visits to local hospital EDs for ILI ranged from three to 10 per day during the week ending 04/28/2024.

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ILI as a weekly percentage of all visits in Saint Louis County hospital EDs was 0.50%, compared to 0.54% in 2023 and 0.63% in 2022, for week 17.

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## Active Influenza Surveillance

Surveillance sites reported 32 cases of influenza A and 20 cases of influenza B for the week ending 04/28/2024. Influenza A accounted for 61.5% of influenza cases (vs. 38.5% for influenza B) for the week ending 04/28/2024 and 66.0% of cases for the week ending 04/21/2024. Overall for the 2023-2024 influenza season, influenza A has accounted for 57.1% of influenza cases.

## Influenza Cases by Report Week and Type

### Saint Louis County Residents Only

For Cases Reported between 10/02/2023 and 04/28/2024

Week Ending	Type A	Type B	Unk Type	Total
10/8/2023	9	1	0	10
10/15/2023	16	2	0	18
10/22/2023	19	2	0	21
10/29/2023	18	4	0	22
11/5/2023	23	2	0	25
11/12/2023	47	5	0	52
11/19/2023	77	8	0	85
11/26/2023	108	5	0	113
12/3/2023	135	19	0	154
12/10/2023	178	21	0	199
12/17/2023	214	58	0	272
12/24/2023	229	48	0	277
12/31/2023	355	98	1	454
1/7/2024	293	72	0	365
1/14/2024	311	85	0	396
1/21/2024	224	98	0	322
1/28/2024	262	140	0	402
2/4/2024	276	219	0	495
2/11/2024	306	332	0	638
2/18/2024	259	451	0	710
2/25/2024	322	491	0	813
3/3/2024	302	431	0	733
3/10/2024	311	394	0	705
3/17/2024	231	269	0	500
3/24/2024	148	207	0	355
3/31/2024	160	147	0	307
4/7/2024	84	89	0	173
4/14/2024	76	73	0	149
4/21/2024	68	35	0	103
4/28/2024	32	20	0	52
<b>Total</b>	<b>5093</b>	<b>3826</b>	<b>1</b>	<b>8920</b>

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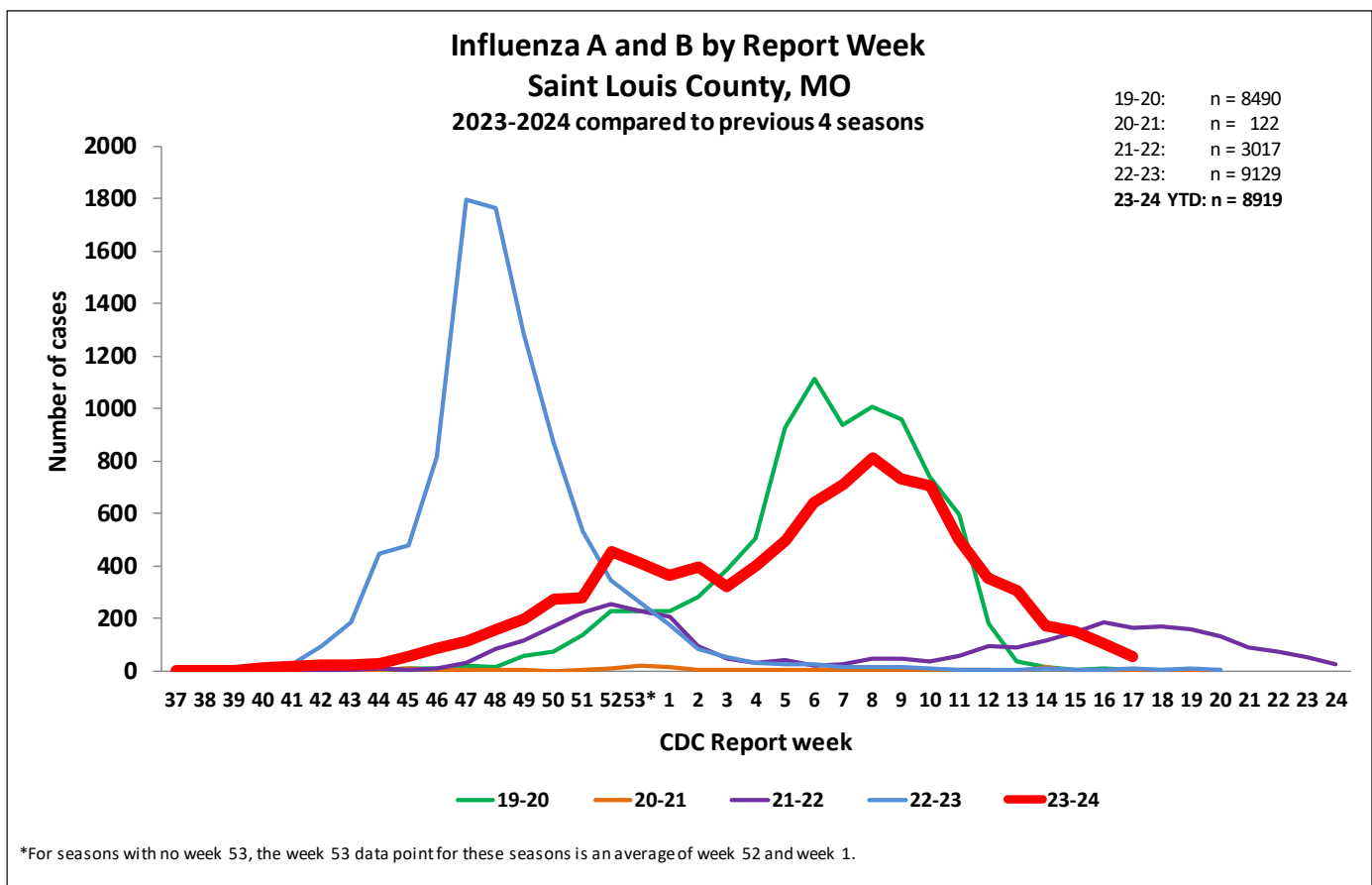
## Influenza Cases by Age and Type

### Saint Louis County Residents Only

For Cases Reported between 10/02/2023 and 04/28/2024

Age Group	Type A n (% of total)	Type B n (% of total)	Unk Type n (% of total)	Total n (%)
00 to <02	233 (3)	177 (2)	0 (0)	410 (5)
02 to 04	476 (5)	452 (5)	0 (0)	928 (10)
05 to 14	944 (11)	1412 (16)	0 (0)	2356 (26)
15 to 24	600 (7)	478 (5)	0 (0)	1078 (12)
25 to 49	1377 (15)	1097 (12)	0 (0)	2474 (28)
50 to 64	718 (8)	138 (2)	0 (0)	856 (10)
65+	745 (8)	72 (1)	0 (0)	817 (9)
<b>Total</b>	<b>5093 (57)</b>	<b>3826 (43)</b>	<b>0 (0)</b>	<b>8919 (100)</b>

## Influenza A and B Cases by CDC Report Week, 2023-2024 Compared to the Previous Four Seasons

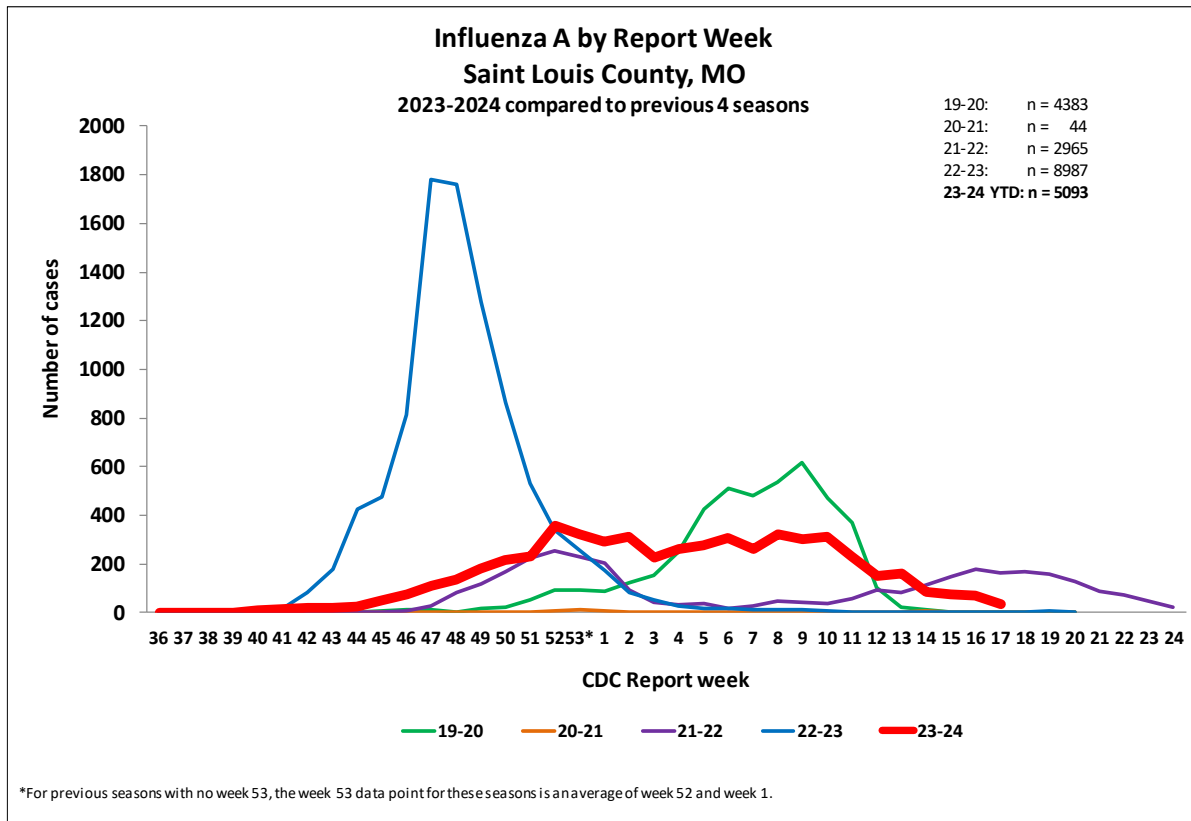


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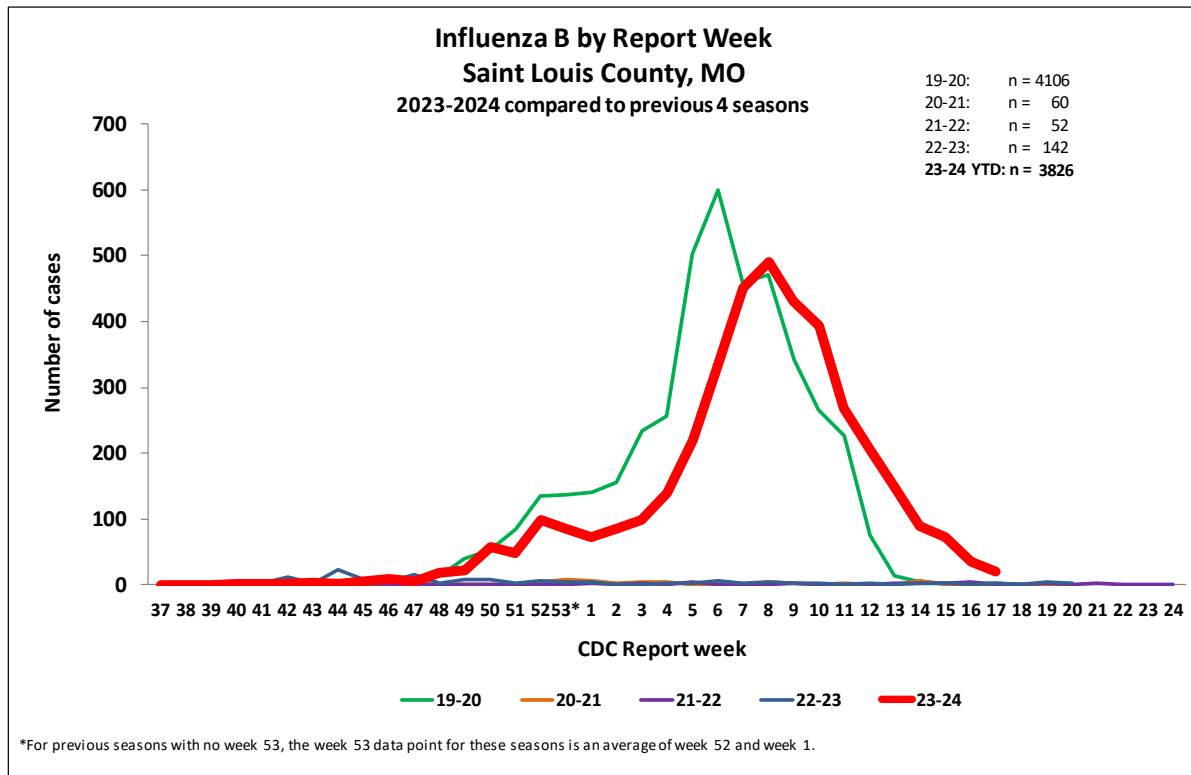
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## Influenza A Cases by CDC Report Week, 2023-2024 Compared to the Previous Four Seasons



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

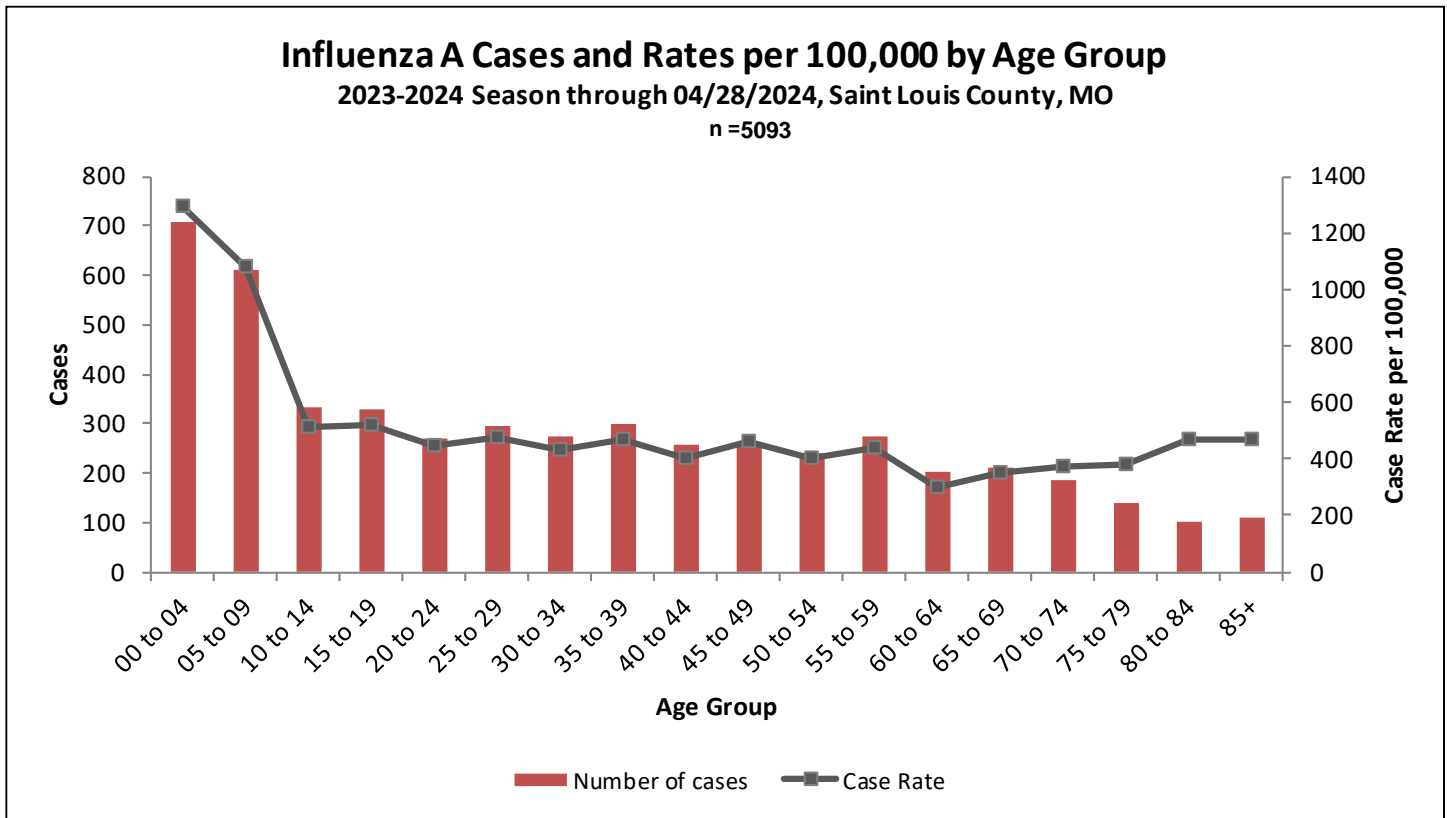


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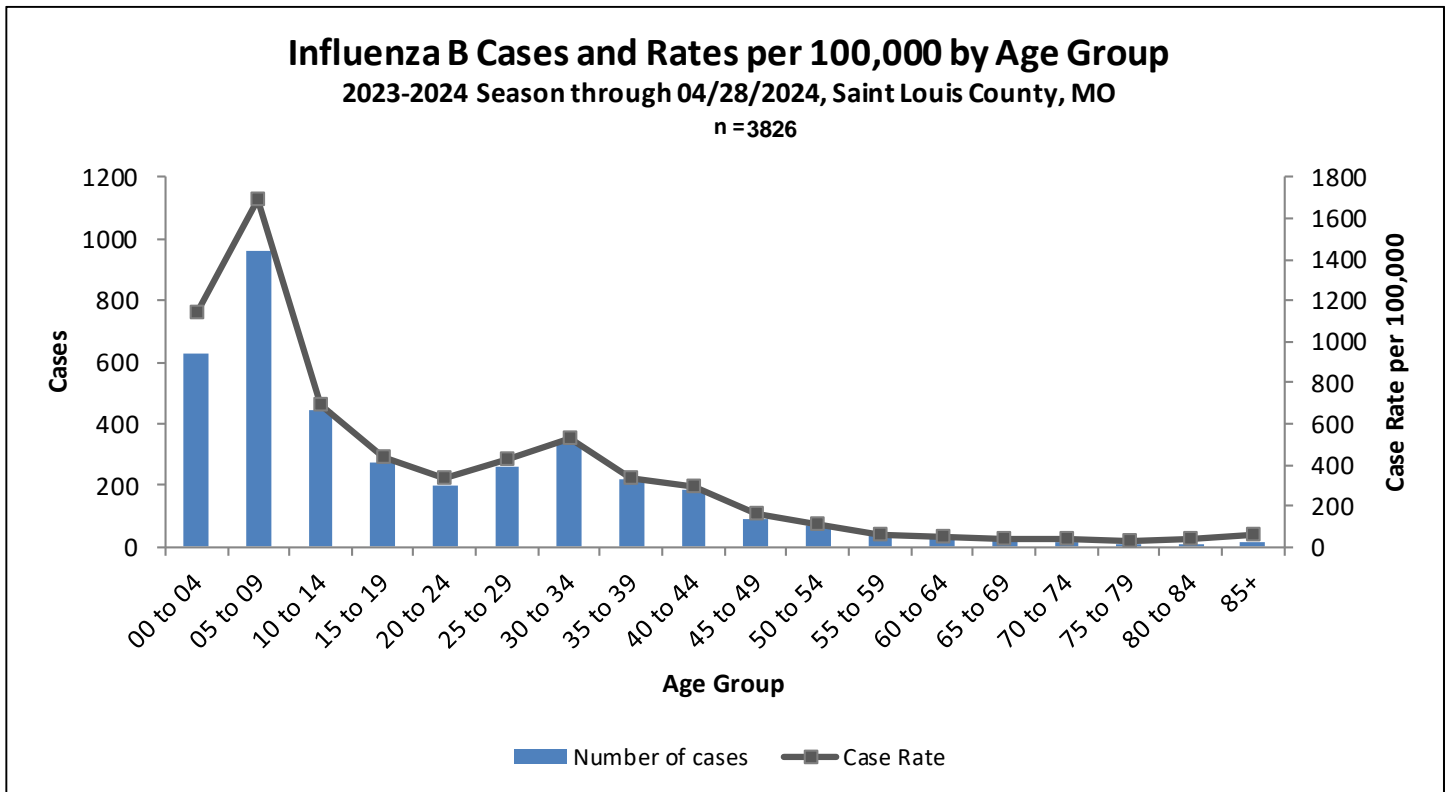
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## Influenza A Cases and Rates by Age Group



## Influenza B Cases and Rates by Age Group

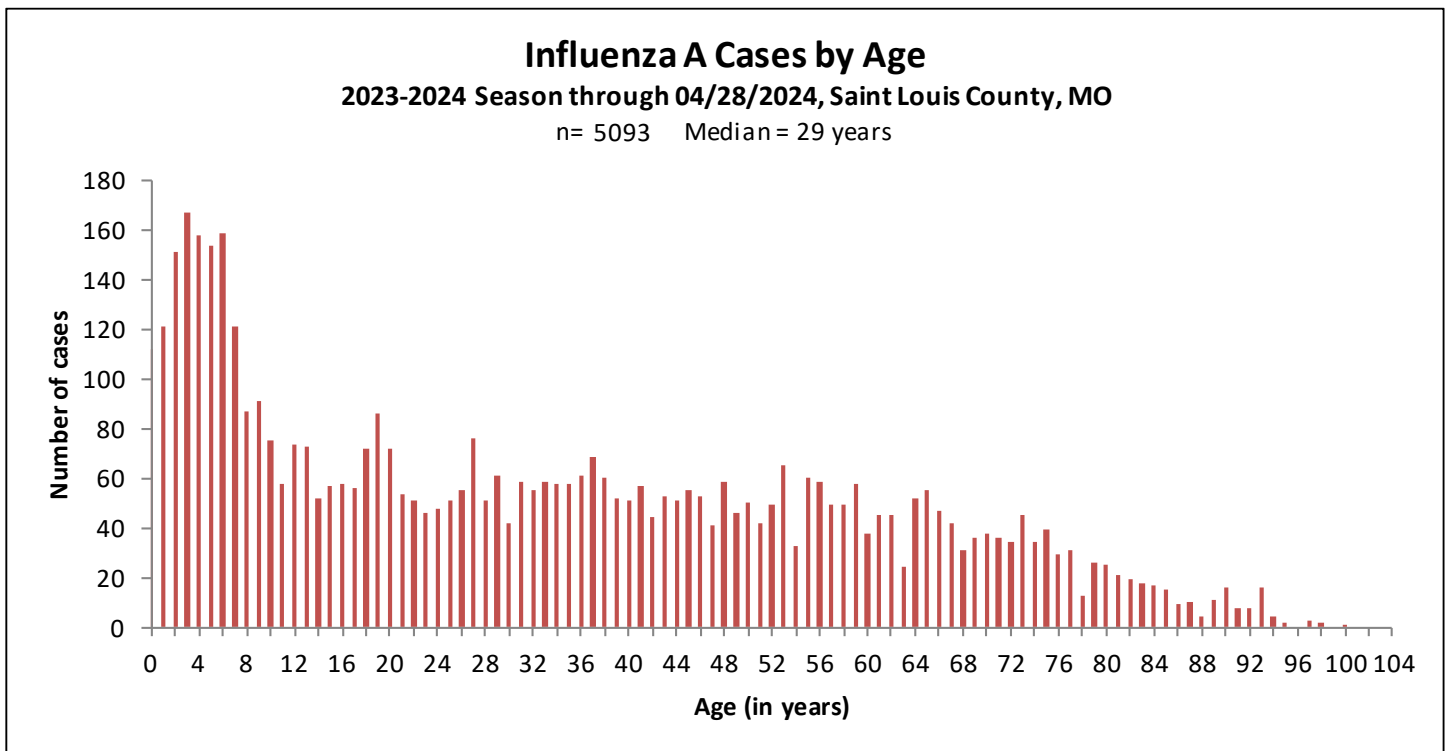


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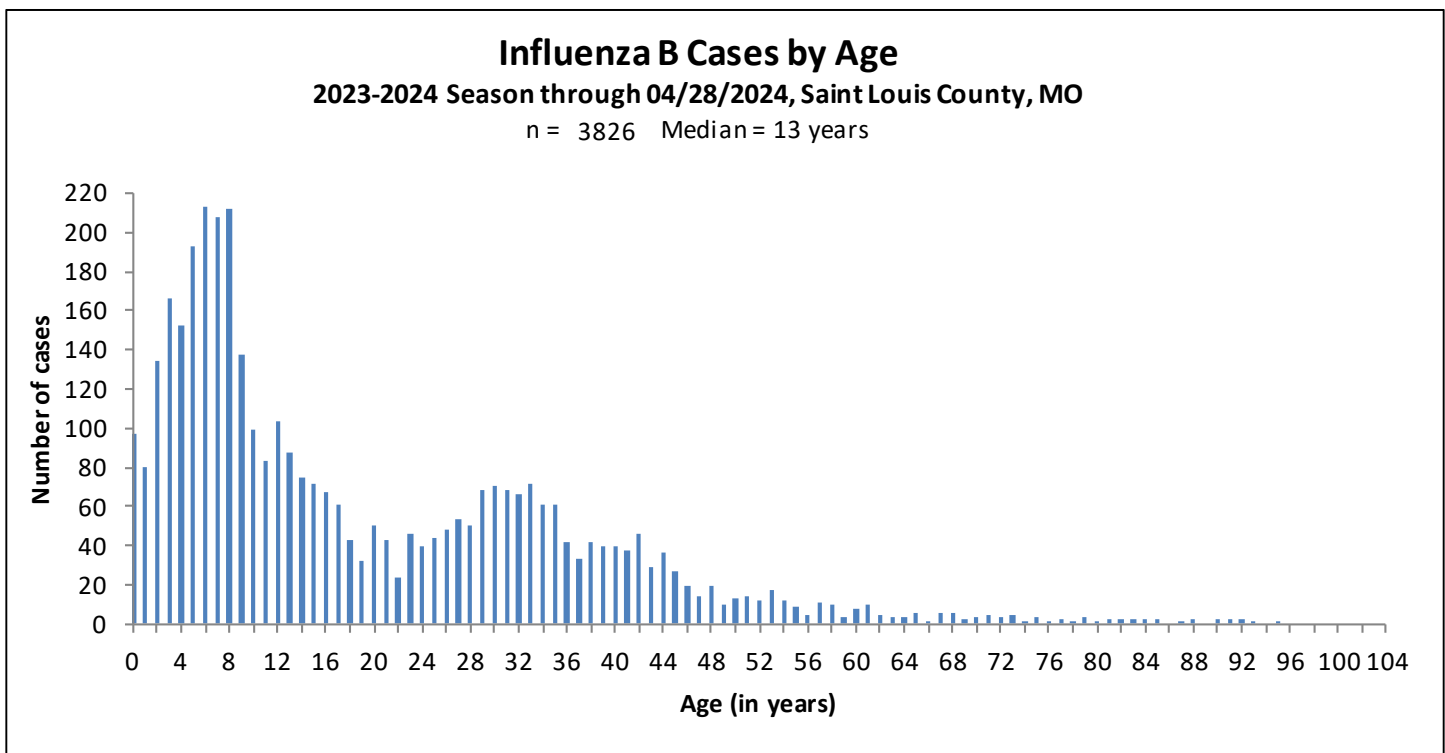
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## Influenza A Cases by Age



## Influenza B Cases by Age



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## Passive Influenza Surveillance

Sixty-four total cases of influenza A and thirty-two total cases of influenza B were reported to DPH during the week ending 04/28/2024. Influenza A accounted for 66.7% of total flu cases reported to DPH (vs 33.3% for influenza B) for the week ending 04/28/2024. Influenza A accounted for 67.6% of total influenza cases for the week ending 04/21/2024. Overall for the 2023-2024 influenza season, influenza A has accounted for 57.3% of total influenza cases.

## Influenza by Report Week and Type

### Saint Louis County Residents Only

For Cases Reported between 10/02/2023 and 04/28/2024

Week Ending	Type A	Type B	Unk Type	Total
10/8/2023	10	2	0	12
10/15/2023	22	3	0	25
10/22/2023	27	2	0	29
10/29/2023	28	5	0	33
11/5/2023	39	3	0	42
11/12/2023	72	10	0	82
11/19/2023	95	16	0	111
11/26/2023	123	7	0	130
12/3/2023	184	32	0	216
12/10/2023	267	52	0	319
12/17/2023	290	103	0	393
12/24/2023	377	86	0	463
12/31/2023	456	122	1	579
1/7/2024	405	115	0	520
1/14/2024	504	137	0	641
1/21/2024	381	178	0	559
1/28/2024	462	211	0	673
2/4/2024	477	356	0	833
2/11/2024	513	541	0	1054
2/18/2024	432	712	0	1144
2/25/2024	552	778	0	1330
3/3/2024	406	485	0	891
3/10/2024	443	553	0	996
3/17/2024	387	466	0	853
3/24/2024	244	307	0	551
3/31/2024	232	237	0	469
4/7/2024	162	159	0	321
4/14/2024	134	125	0	259
4/21/2024	115	55	0	170
4/28/2024	64	32	0	96
<b>Total</b>	<b>7903</b>	<b>5890</b>	<b>1</b>	<b>13794</b>



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## **Saint Louis County Influenza Outbreaks:**

As of the week ending 04/28/2024, there have been no outbreaks of influenza reported to DPH.

## **Weekly Virus/Microbiology Update, BJC HealthCare:**

<https://diorama.wustl.edu/weekly-report>

**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.