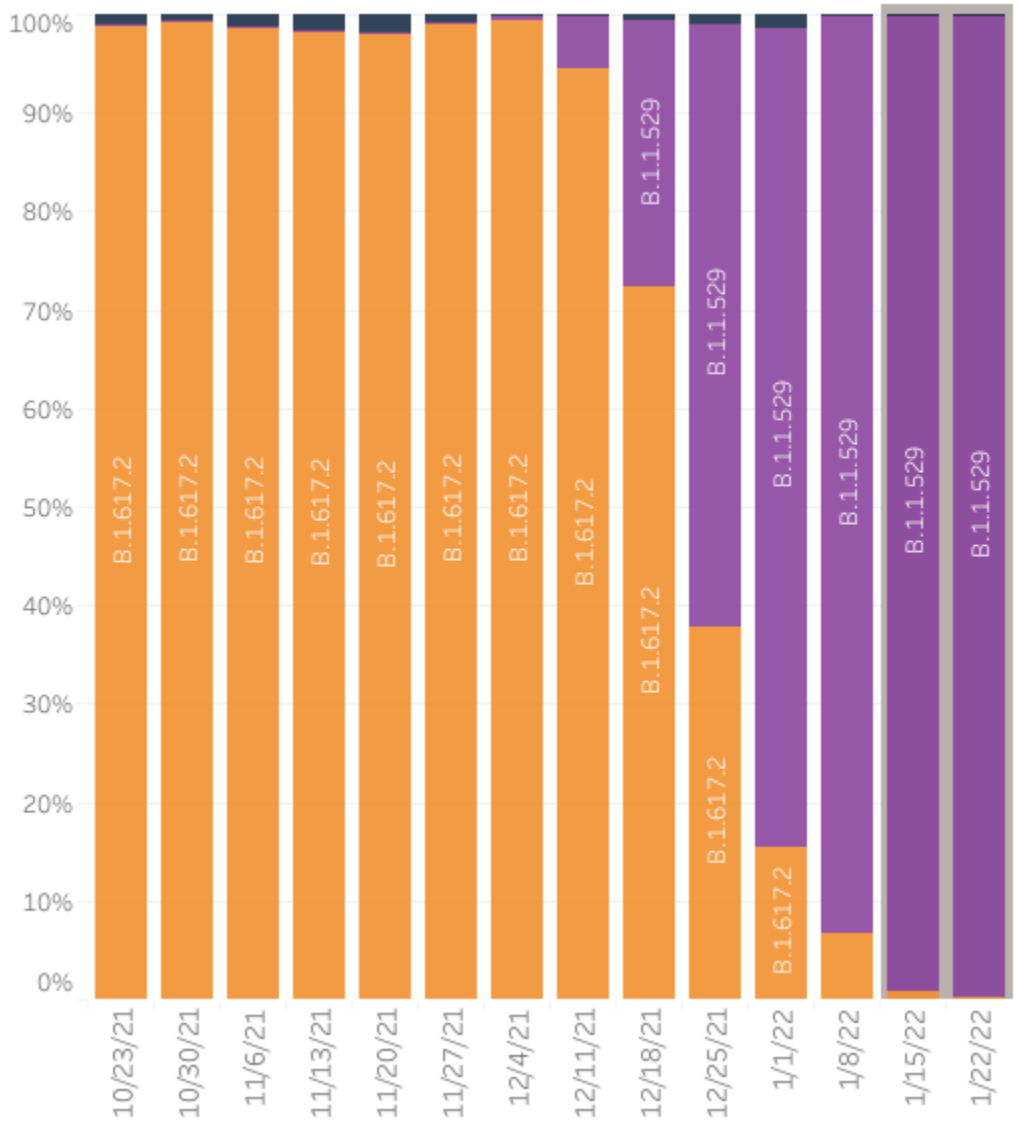
CDPH
Chicago Department of Public Health

Ask Dr. Arwady

2/3/2022

Guest: Stephanie Gretsch, Epidemiologist, Chicago Department of Public Health

Variant Surveillance, Midwest: It's nearly ALL Omicron



Omicron (99.8%)

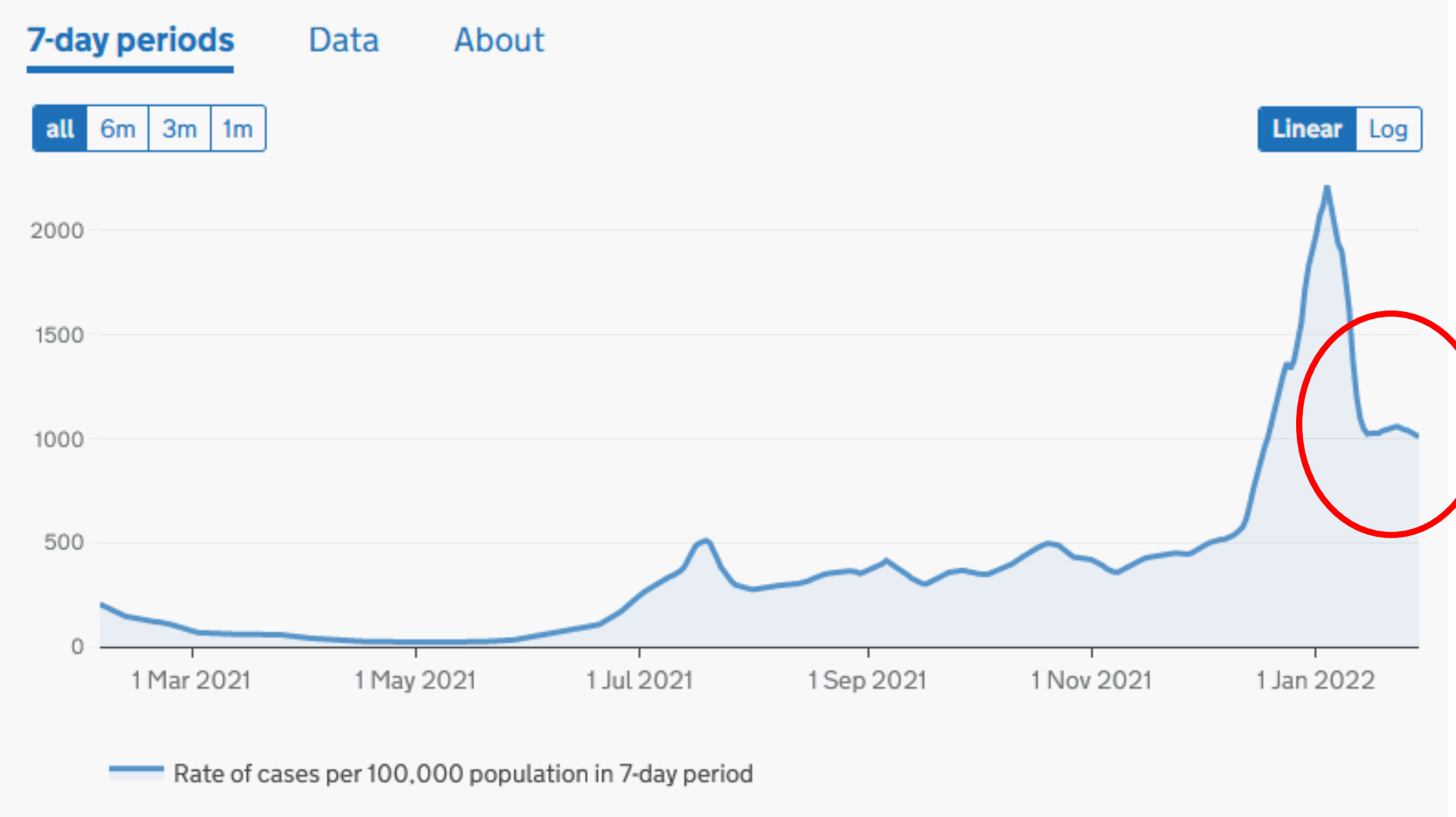
Delta (0.2%)

Other (0.0%)

- Omicron subvariant BA.2 detected in Chicago.
- Remains *uncommon* but we expect to see the proportion increase among Omicron samples.
- Not clear that there are major differences in outcomes, following closely. No new issues with vaccine effectiveness at this point.
- Cases continue to increase in Denmark, and decrease has slowed in UK, *possibly* as a result of more BA.2. But in South Africa, higher proportion of BA.2 has *not* led to increased cases.

https://covid.cdc.gov/covid-data-tracker/#variant-proportions

United Kingdom: COVID-Case Rate per 100,000



coronavirus.data.gov.uk

Chicago COVID-19 Community Transmission and Risk Matrix

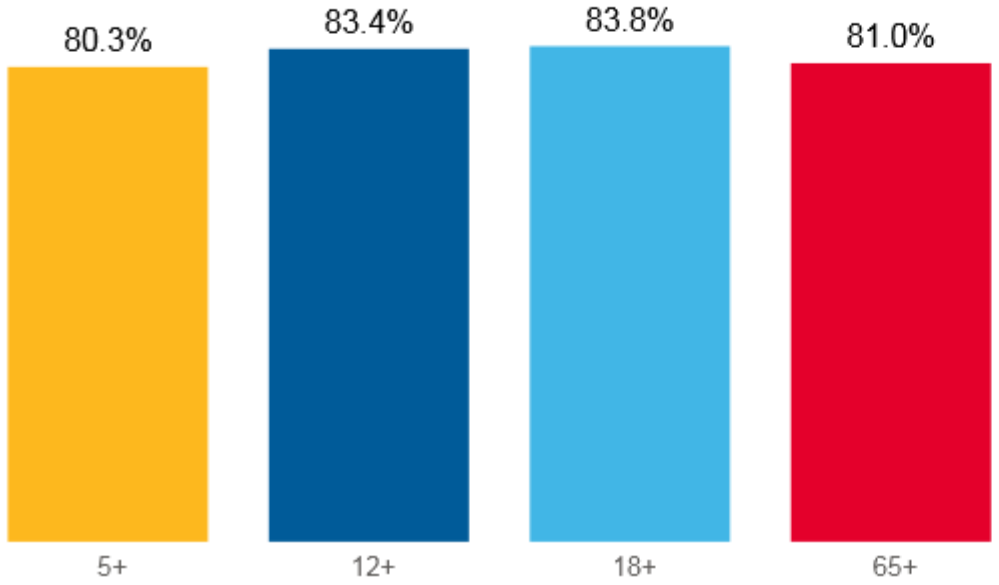
	VERY HIGH TRANSMISSION	HIGH TRANSMISSION	SUBSTANTIAL TRANSMISSION	LOWER TRANSMISSION	LOW TRANSMISSION
COVID-19 CASES DIAGNOSED PER DAY Chicago residents - 7-day rolling daily average	800+ **Current: 889** Decreasing	400 – 799	200 – 399	20 – 199	<20
COVID-19 TEST POSITIVITY Chicago residents - 7-day rolling daily average	10%+	6.6 – 9.9%	5.0 – 6.5%	2 – 4.9% **Current: 4.1%** Decreasing	<2%
HOSPITAL BEDS (NON-ICU) OCCUPIED BY COVID PATIENTS Chicago hospitals - 7-day rolling daily average	1250+	750 – 1249 **Current: 982** Decreasing	250 – 749	100 – 249	<100
ICU BEDS OCCUPIED BY COVID PATIENTS Chicago hospitals - 7-day rolling daily average	400+	300 – 399	100 – 299 **Current: 232** Decreasing	20 – 99	<20

Source: Chicago Department of Public Health, data current as of February 3, 2022. These metrics represent general community COVID transmission and should not be applied to individual settings that have mitigation practices in place.

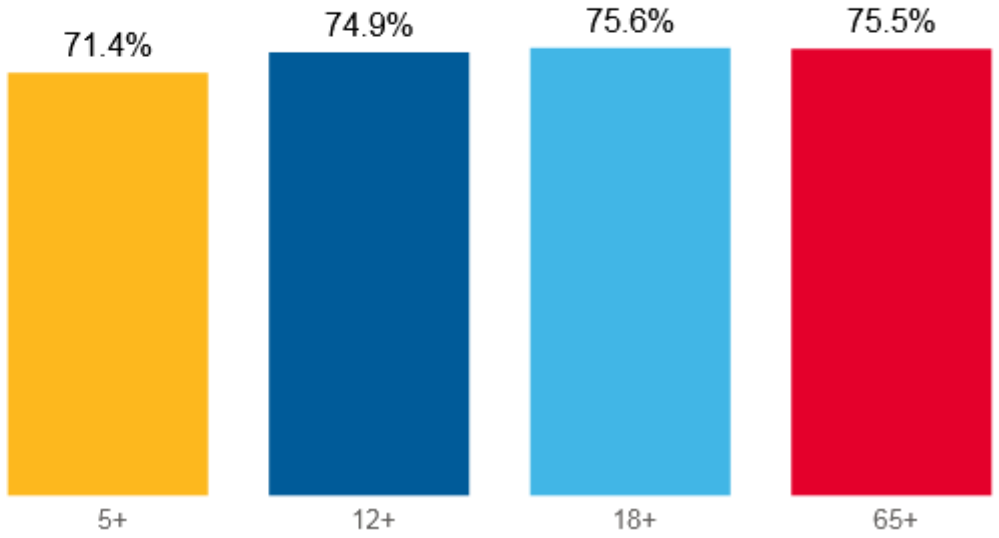
Citywide Vaccination Rate

Almost ¾ of Chicagoans 12+ are FULLY Vaccinated

At least one dose (% vaccinated as of 2/1/2022)



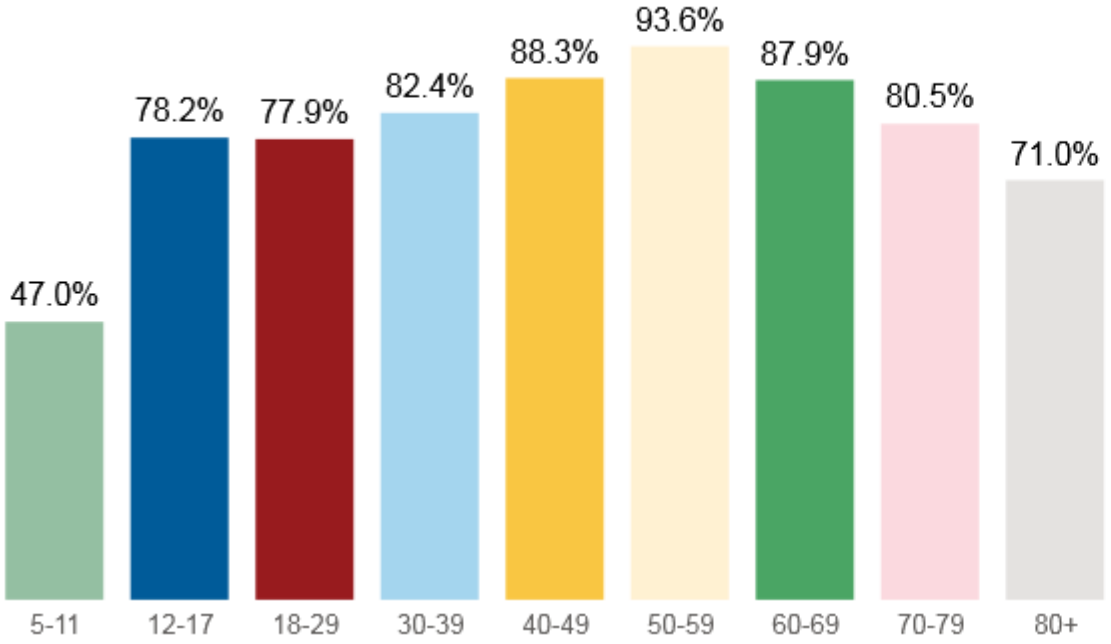
Completed vaccine series (% vaccinated as of 2/1/2022)



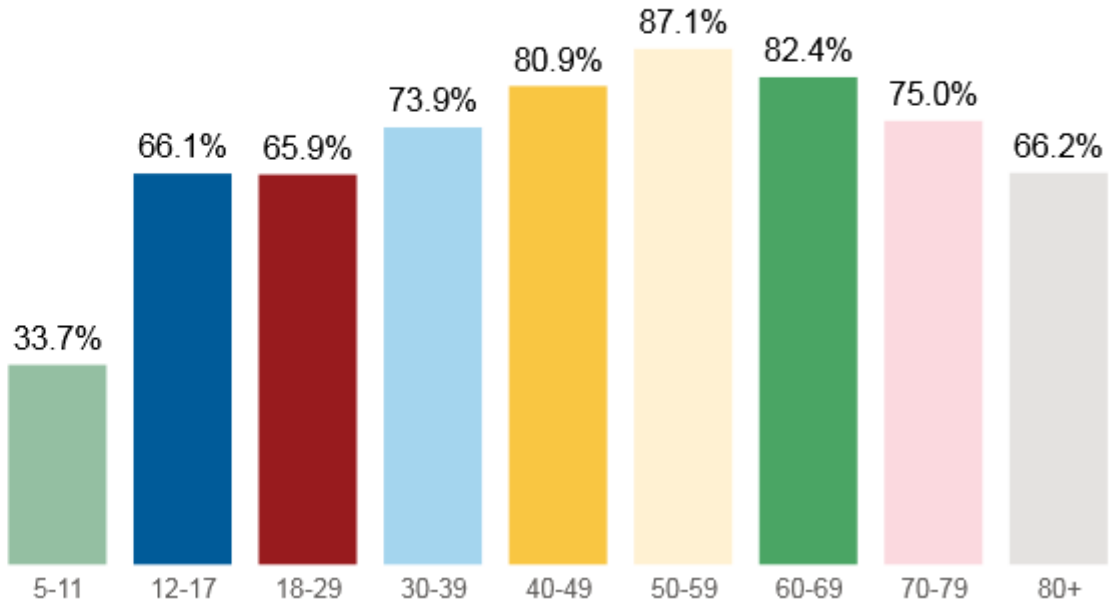
Citywide Vaccination Rate by Age

Approaching 50% of 5-11 y/o in Chicago who have received their first dose of COVID vaccine

At least one dose (% vaccinated as of 2/1/2022)

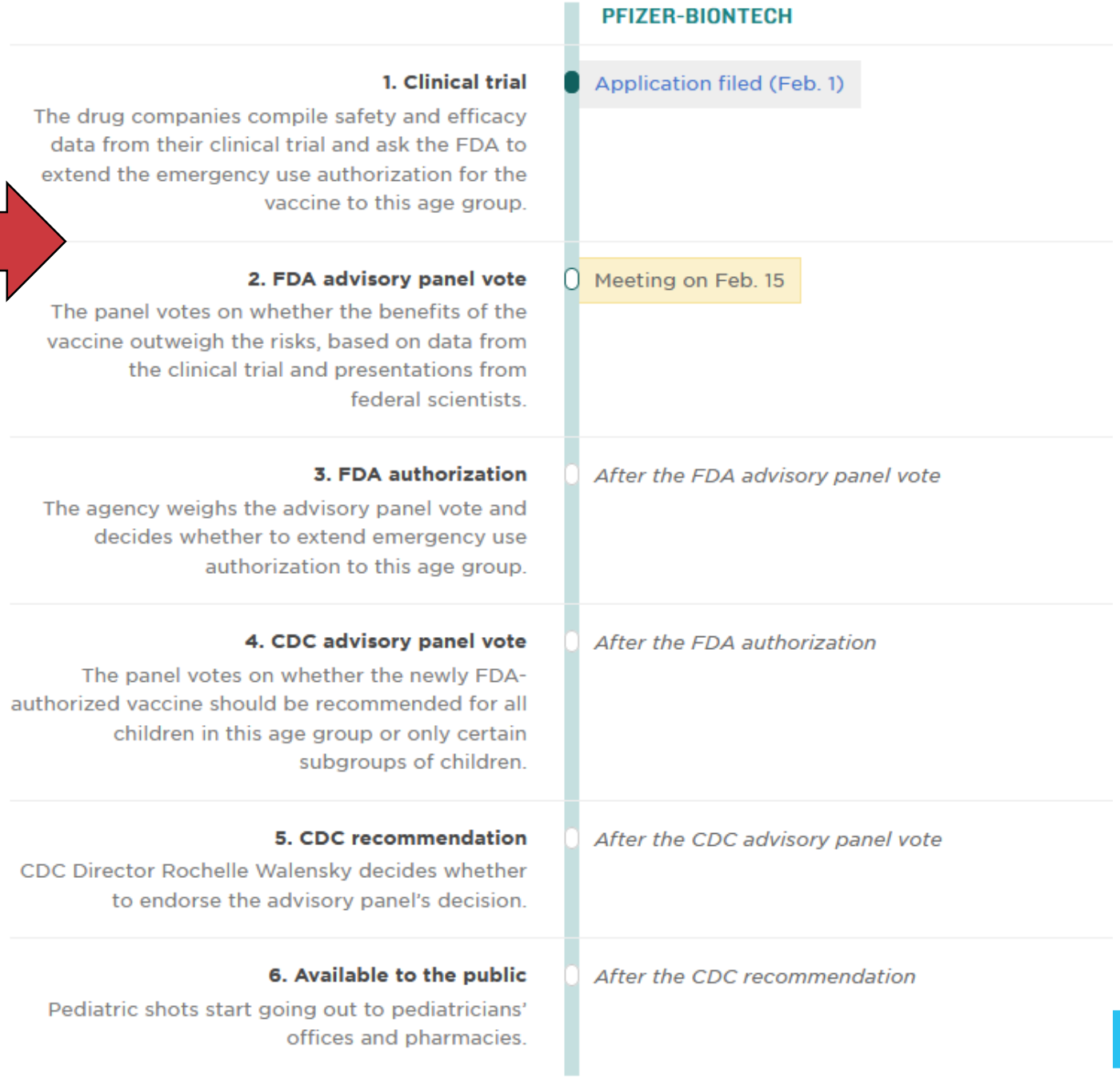


Completed vaccine series (% vaccinated as of 2/1/2022)



The road to vaccine authorization for kids under 5

We are here



SATURDAY

SUNDAY

FAMILY COVID VACCINE CLINICS

ADULT AND PEDIATRIC VACCINE DOSES & BOOSTERS AVAILABLE

RICHARD J. DALEY COLLEGE 7500 S Pulaski Rd	Saturdays, 9am-2pm Jan. 22 & Feb.12
WILBUR WRIGHT COLLEGE 4300 N Narragansett Ave	Sundays, 9am-2pm Jan. 23 & Feb.13
KENNEDY-KING COLLEGE 6301 S Halsted St	Saturdays, 9am-2pm Jan. 29 & Feb.19
OLIVE-HARVEY COLLEGE 10001 S Woodlawn Ave	Sundays, 9am-2pm Jan. 30 & Feb.20
TRUMAN COLLEGE 1145 W. Wilson Ave	Saturdays, 9am-2pm Feb. 5 & Feb.26
MALCOLM X COLLEGE 1900 W Jackson Blvd	Sundays, 9am-2pm Feb. 6 & Feb.27

CHICAGO
Mayor Lori E. Lightfoot

REGISTER: rebrand.ly/YouthVax
(312) 746-4835

Need a vaccine or a booster? Have questions?

visit CHI.GOV/COVIDVAX

or call 312-746-4835

CDPH

PROTECT CHICAGO

Influenza Surveillance in Chicago
2/3/2022

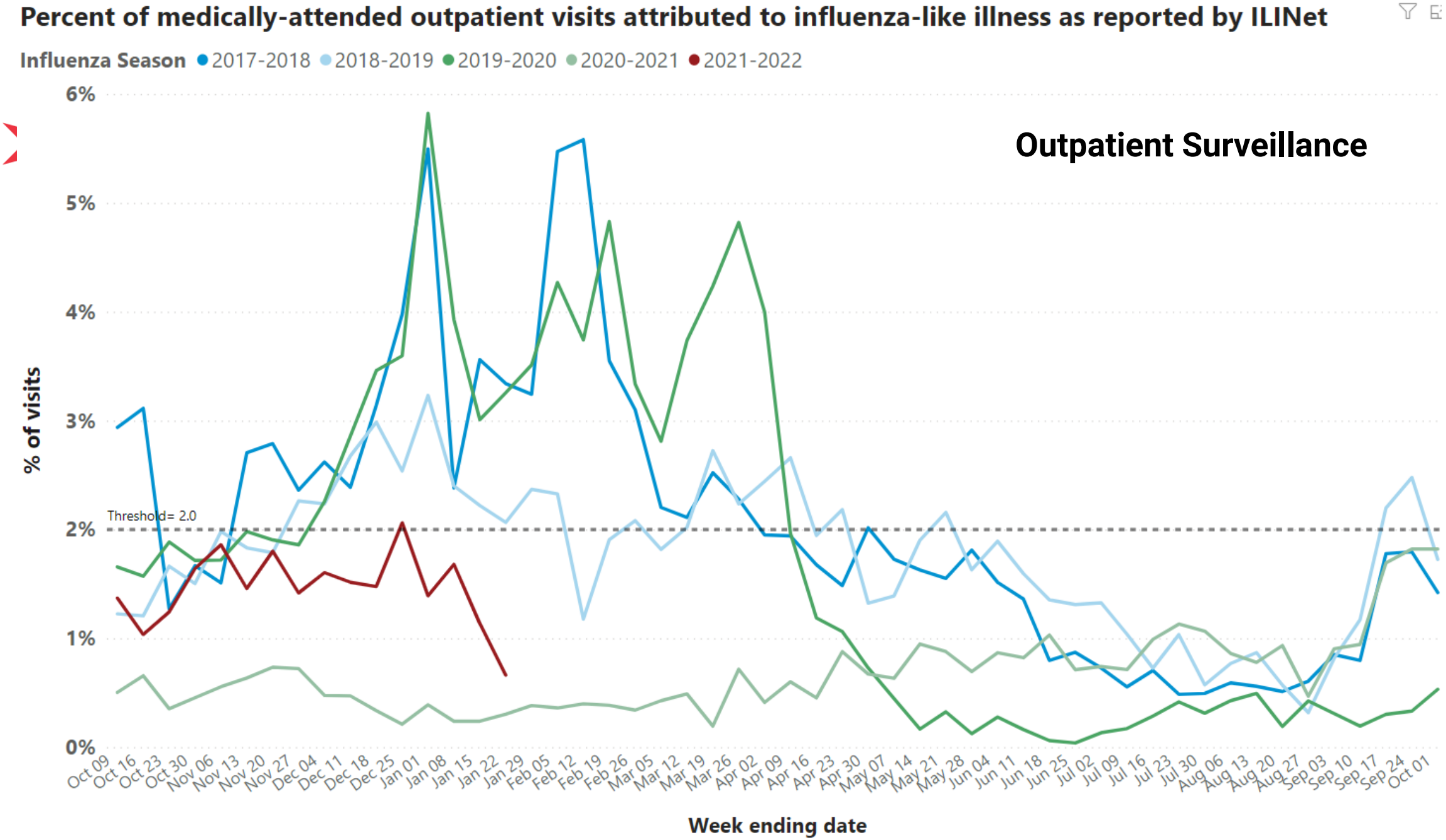
Influenza Surveillance Objectives

- Find out when and where influenza activity is occurring
- Determine what influenza viruses are circulating and detect changes in influenza virus
- Measure the burden of severe illness caused by influenza and describe risk factors for severe disease
- Provide guidance for management of outbreaks in high-risk settings

Influenza Surveillance Objectives

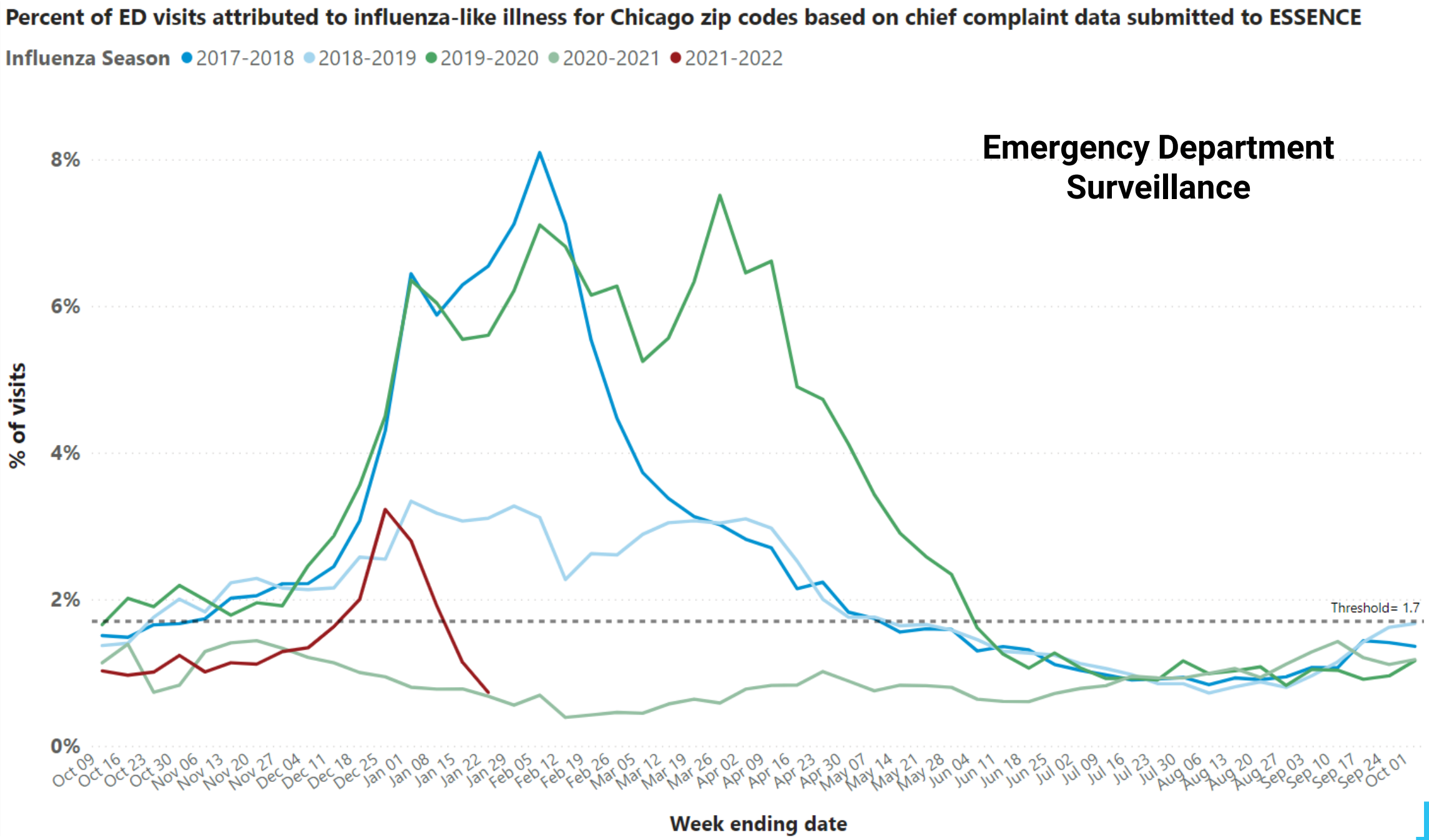
- Find out when and where influenza activity is occurring
  - Outpatient illness surveillance (ILINet)
    - Measure the percent of outpatient visits due to influenza-like illness
  - Emergency department illness surveillance
    - Measure the percent of emergency department visits due to influenza-like illness
  - Sentinel laboratory surveillance
    - Measure the number and percent of specimens positive for influenza

Outpatient Surveillance



https://www.chicago.gov/city/en/sites/flu/home/chicago-flu-update.html. Accessed: 2/3/2022

Emergency Department Surveillance



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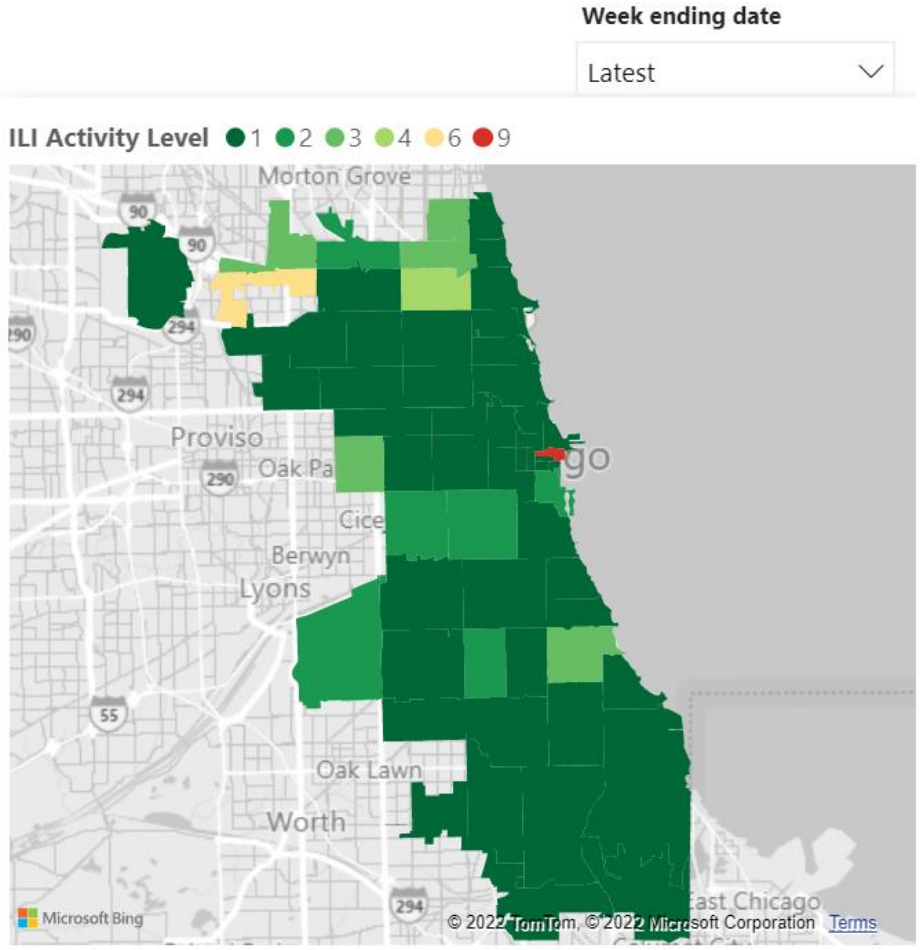
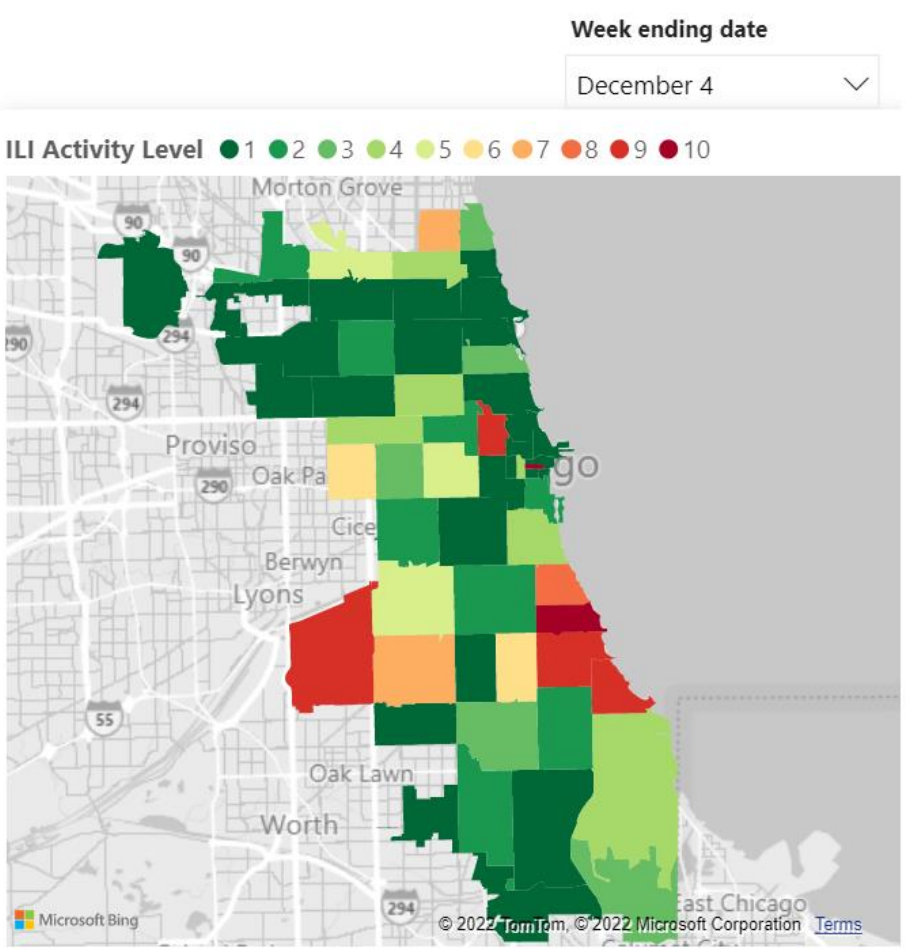
Influenza-like Activity Maps

Emergency Department Surveillance





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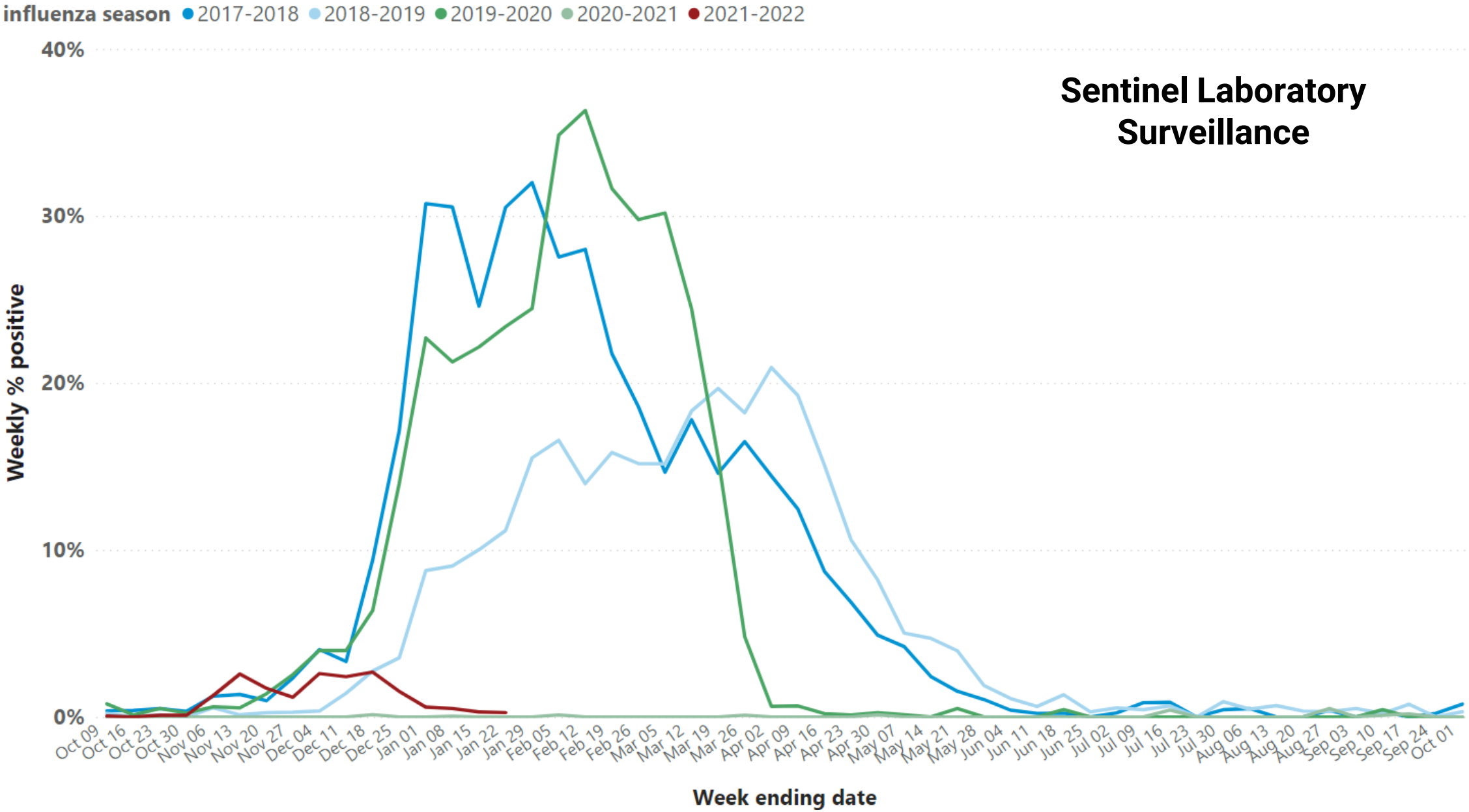
Weekly percent of reported specimens testing positive for influenza



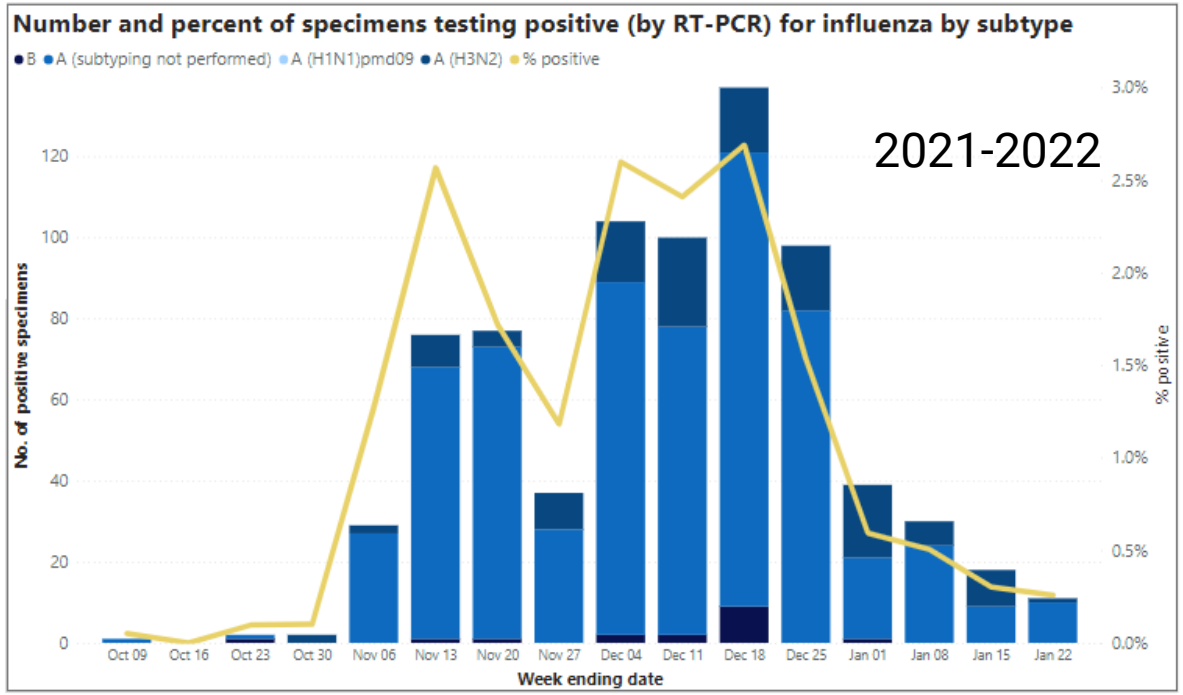
Sentinel Laboratory Surveillance

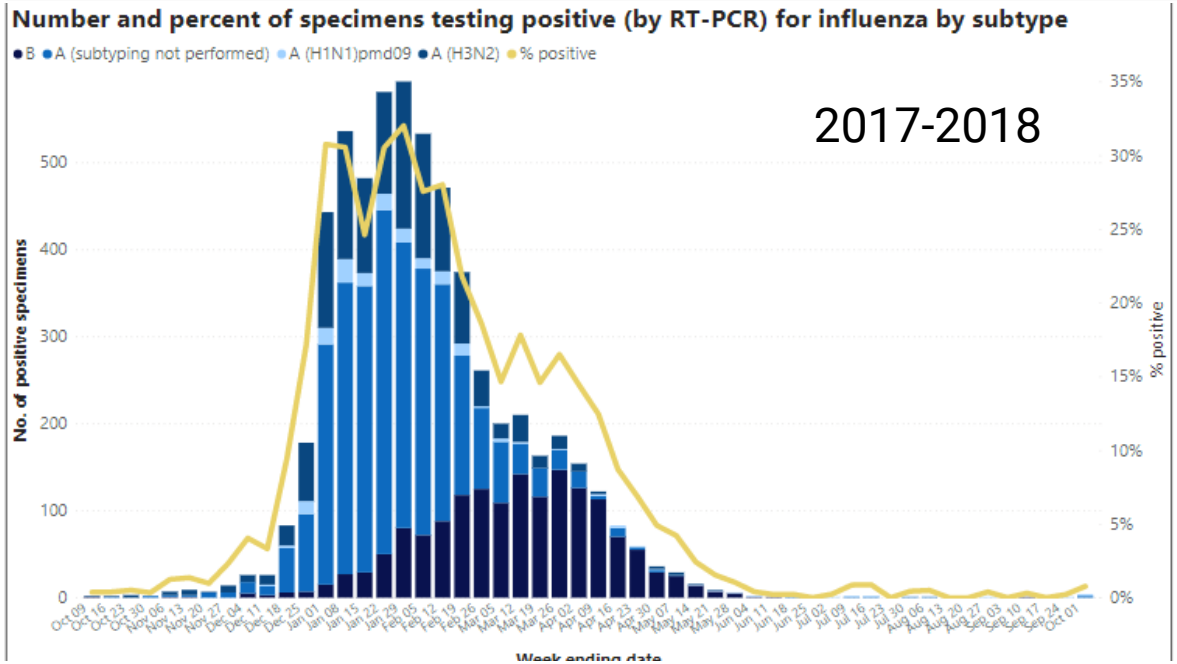
https://www.chicago.gov/city/en/sites/flu/home/chicago-flu-update.html. Accessed: 2/3/2022

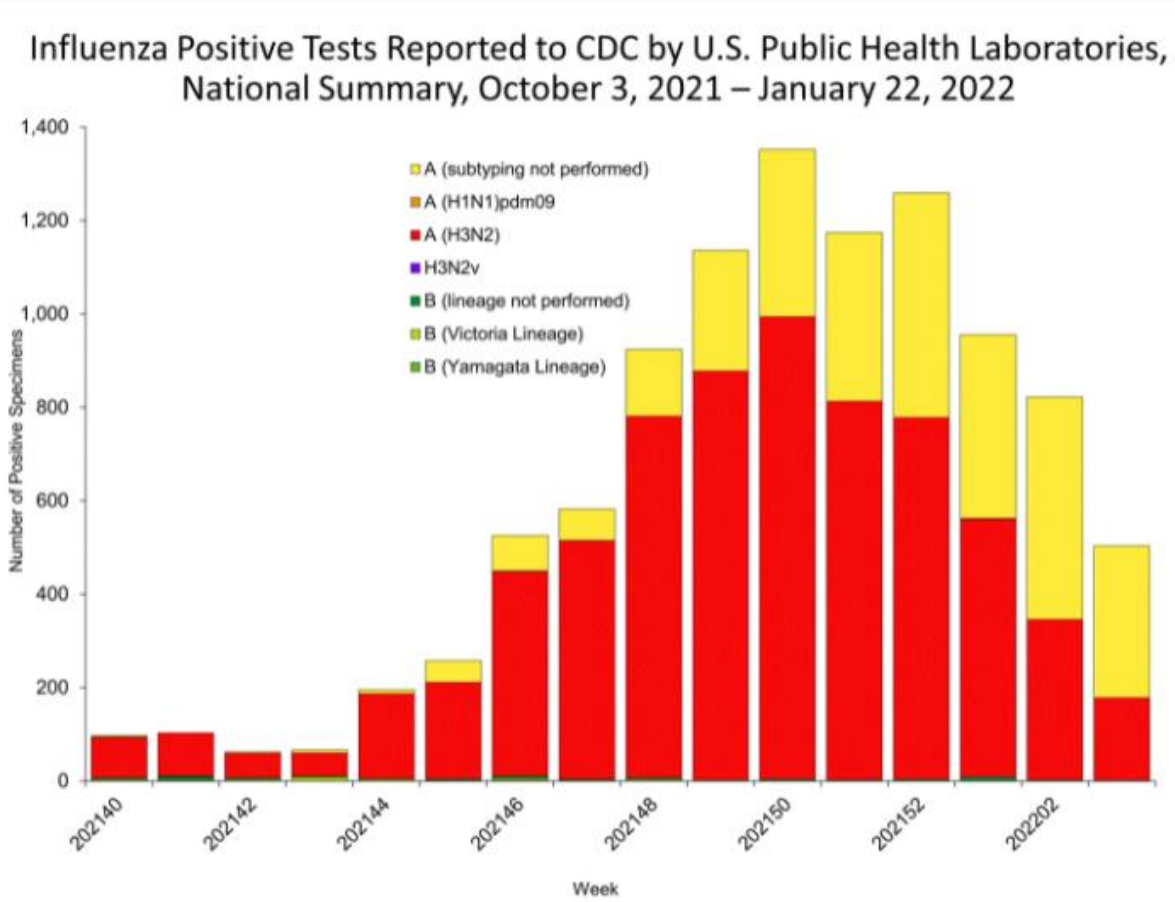
Influenza Surveillance Objectives

- Determine what influenza viruses are circulating and detect changes in influenza virus
  - Sentinel laboratory surveillance
    - Monitor the subtypes of influenza viruses detected at Chicago laboratories
  - Surveillance for novel influenza A viruses
    - Infections due to influenza A viruses that are subtyped as nonhuman in origin and those that cannot be subtyped with standard laboratory methods and reagents are immediately reportable in Illinois
  - Virus characterization at CDC
    - Assess how similar the currently circulating influenza viruses are to viruses used to produce current influenza vaccines
    - Monitor evolutionary changes
    - Determine susceptibility to antivirals

Sentinel Laboratory Surveillance







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https://www.cdc.gov/flu/weekly/index.htm. Accessed 2/3/2022

Influenza Virus Characterization at CDC

Virus Subtype or Lineage	Genetic Characterization				
	Total No. of Subtype/Lineage Tested	HA Clade	Number (% of subtype/lineage tested)	HA Subclade	Number (% of subtype/lineage tested)
A/H1	3				
		6B.1A	3 (100%)	5a.1	2 (66.7%)
				5a.2	1 (33.3%)
A/H3	437				
		3C.2a1b	437(100%)	1a	1 (0.2%)
				1b	1 (0.2%)
				2a	0
				2a.1	0
				2a.2	435 (99.5%)
		3C.3a	0	3a	0
B/Victoria	20				
		V1A	20 (100%)	V1A	0
				V1A.1	0
				V1A.3	9 (45.0%)
				V1A.3a	0
				V1A.3a.1	0
				V1A.3a.2	11 (55.0%)

https://www.cdc.gov/flu/weekly/index.htm. Accessed 2/3/2022

Antiviral susceptibility testing at CDC

Antiviral Medication			Total Viruses	A/H1	A/H3	B/Victoria	B/Yamagata
Neuraminidase Inhibitors	Oseltamivir	Viruses Tested	484	3	461	20	0
		Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
		Highly Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
	Peramivir	Viruses Tested	484	3	461	20	0
		Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
		Highly Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
	Zanamivir	Viruses Tested	484	3	461	20	0
		Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
		Highly Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
PA Cap-Dependent Endonuclease Inhibitor	Baloxavir	Viruses Tested	479	3	456	20	0
		Reduced Susceptibility	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)

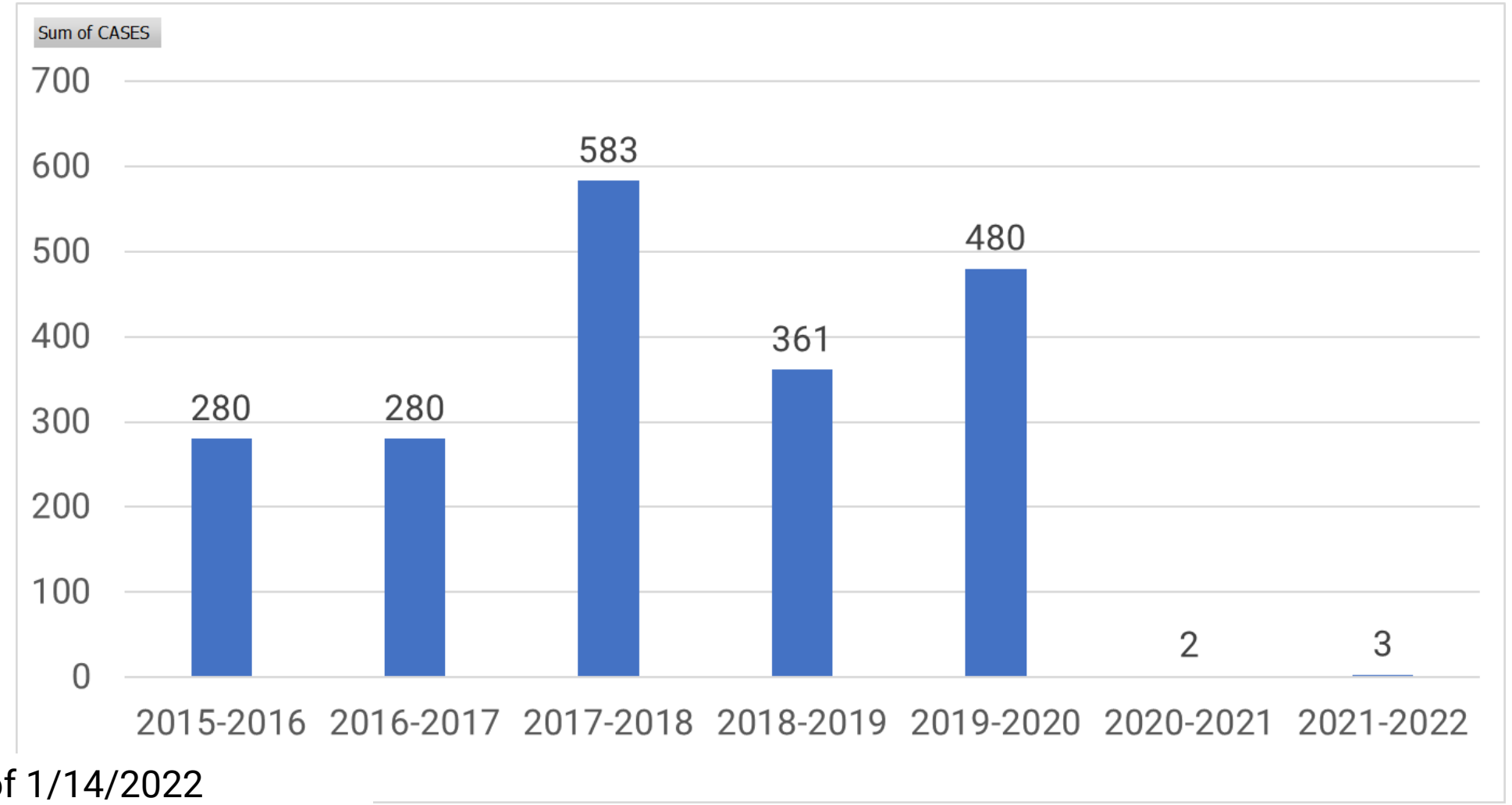
https://www.cdc.gov/flu/weekly/index.htm. Accessed 2/3/2022

Influenza Surveillance Objectives

- Measure the burden of severe illness caused by influenza and describe risk factors for severe disease
  - ICU hospitalization surveillance
  - Mortality surveillance
    - Pediatric influenza-associated deaths
    - Preliminary death certificate data to monitor the percent of all deaths due to pneumonia or influenza

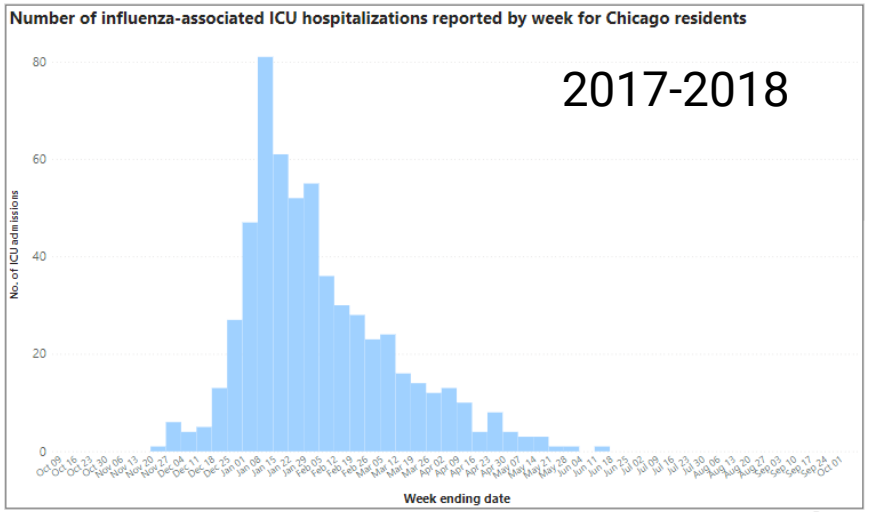
Number of Influenza-Associated ICU Hospitalizations

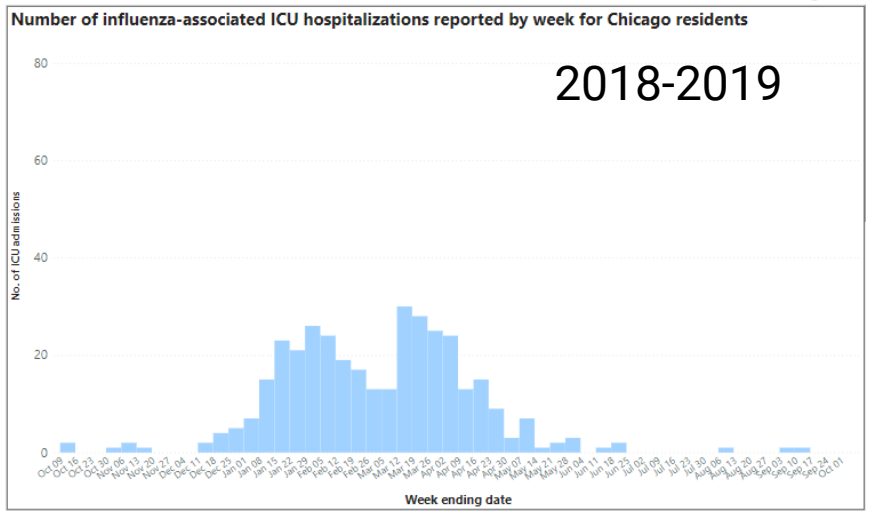
1,989 reported cases since the 2015-2016 season

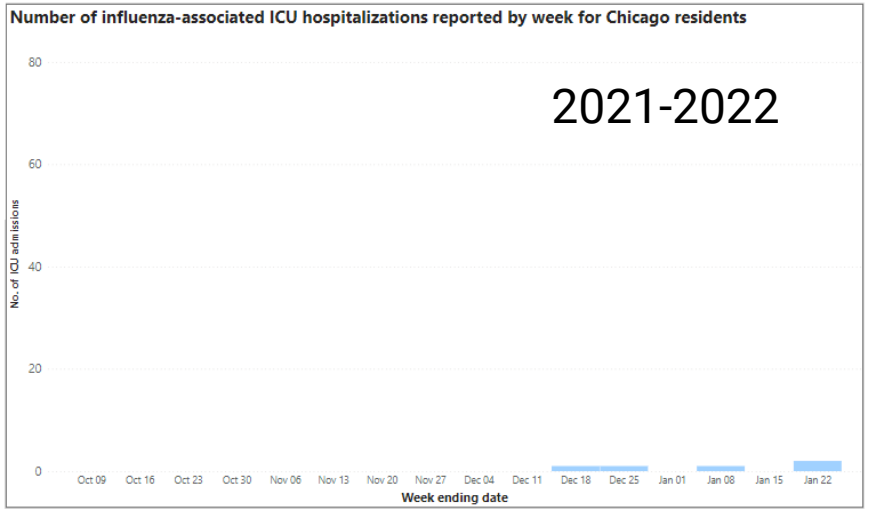


Data as of 1/14/2022

Influenza-Associated ICU Hospitalizations







Characteristics of Influenza-Associated ICU Hospitalizations

Group	Current Week Count	Current Week %	Cumulative Count	Cumulative %
Citywide				
Citywide	2	100.0%	5	100.0%
Age				
0-4	0	0.0%	0	0.0%
5-17	0	0.0%	0	0.0%
18-24	0	0.0%	0	0.0%
25-49	1	50.0%	2	40.0%
50-64	1	50.0%	2	40.0%
65+	0	0.0%	1	20.0%
Unknown	0	0.0%	0	0.0%
Gender				
Female	1	50.0%	2	40.0%
Male	1	50.0%	3	60.0%
Race-Ethnicity				
Latinx	1	50.0%	2	40.0%
Black Non-Latinx	0	0.0%	0	0.0%
White Non-Latinx	0	0.0%	2	40.0%
Asian Non-Latinx	0	0.0%	0	0.0%
Other Non-Latinx	1	50.0%	1	20.0%
Unknown-Race	0	0.0%	0	0.0%

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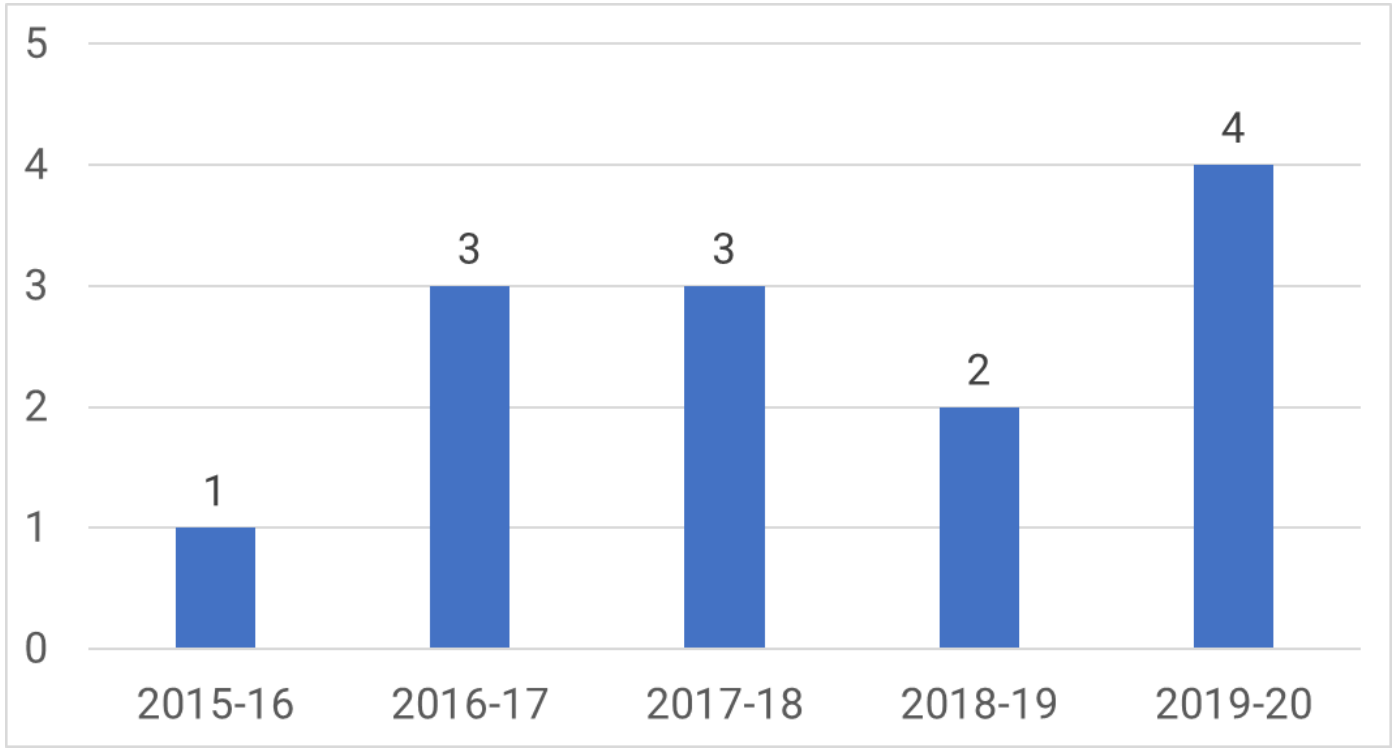
Pediatric Influenza-associated Deaths

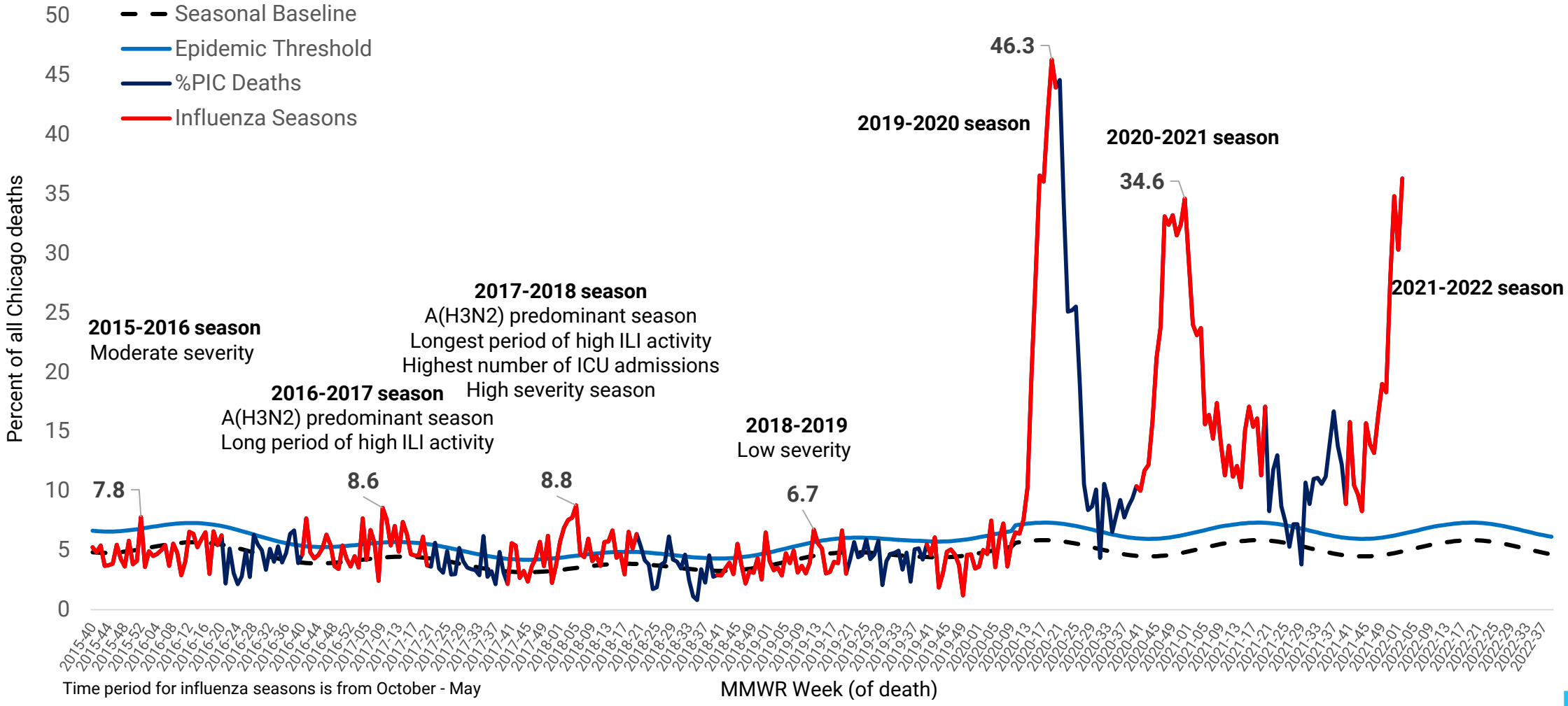
- Hospital infection control departments report cases in I-NEDSS

13 reported pediatric deaths since the 2015-2016 season



Data as of 1/14/2022

Mortality Surveillance: Pneumonia/Influenza/COVID-19 (PIC)



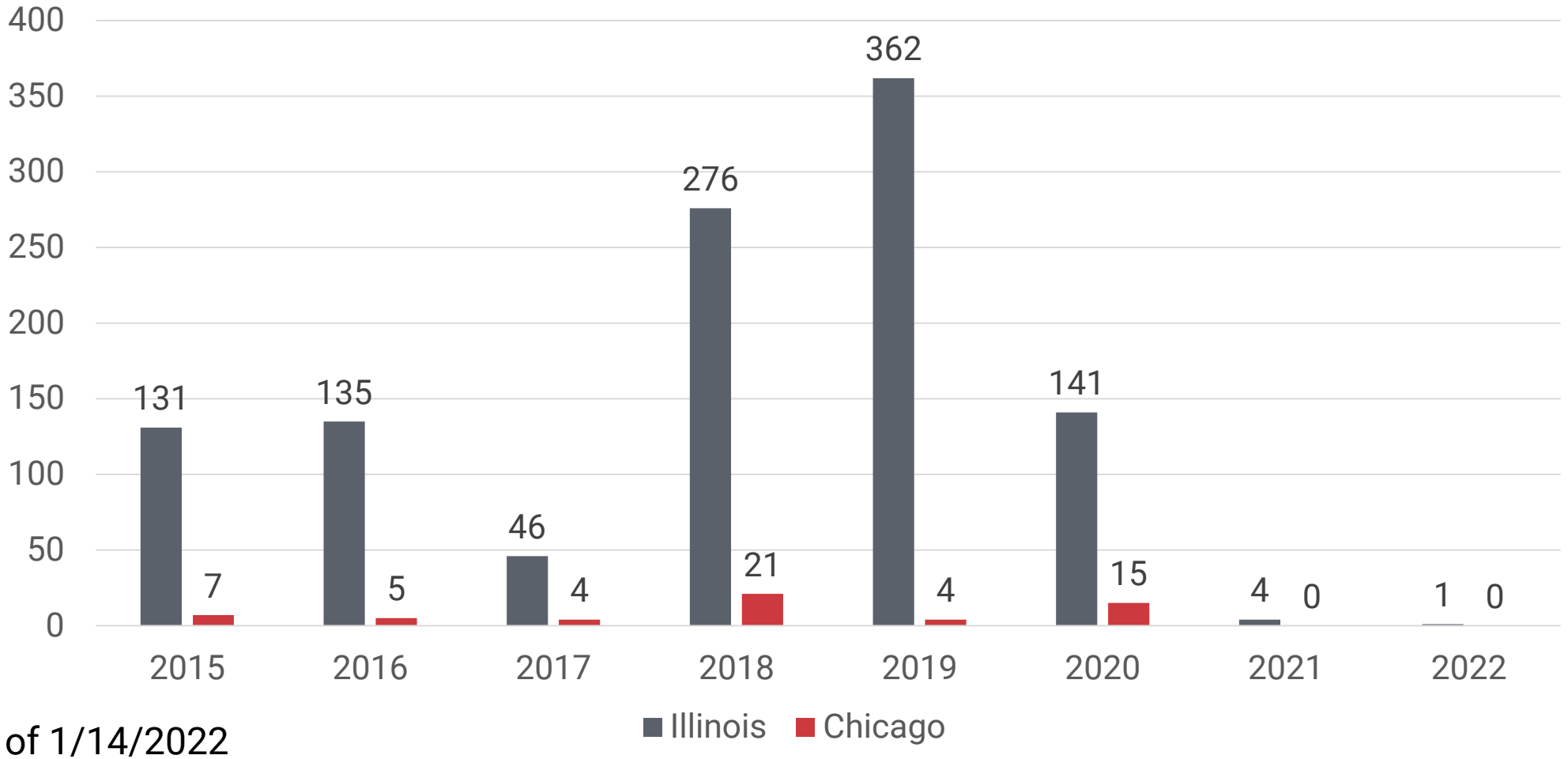
Data as of 1/31/2022

Influenza Surveillance Objectives

- Provide guidance for management of outbreaks in high-risk settings
  - Outbreaks of influenza in long-term care facilities are reportable in Illinois
  - COVID-19 and influenza positive test results among residents and staff in long-term care facilities are reported through CDC's National Healthcare Safety Network

Reported Long Term Care Facility Influenza Outbreaks

56 reported LTCF outbreaks since 2015



Data as of 1/14/2022