

# Covid-19 Health Metrics

January 27, 2022

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# MA State Data



# Massachusetts Department of Public Health | COVID-19 Dashboard

## Trends: 7-day Averages Over Time

Released on: January 27, 2022  
Data as of: January 26, 2022  
Caution: recent data may be incomplete

### Navigation

Today's Overview

#### Overview Trends

COVID-19 Cases

COVID-19 Testing

Hospitalizations

COVID-19 Deaths

Higher Ed & LTCF

Patient Breakdown

City & Town Data

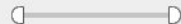
Resources

Data Archive

#### Select dates:

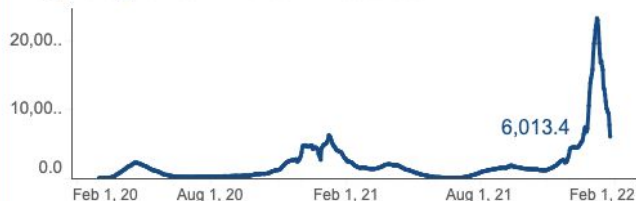
3/1/2020

1/26/2022



### Cases

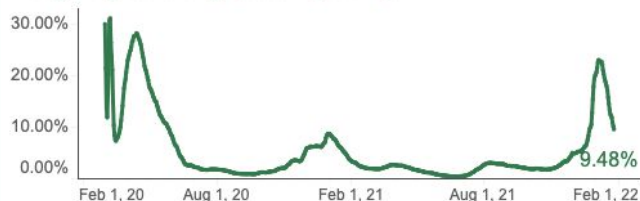
7-day average of COVID-19 confirmed cases



The lowest observed value was 64.1 on 6/25/2021.

### Testing

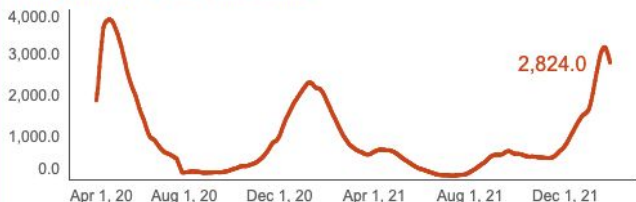
7-day weighted average percent positivity



The lowest observed value was 0.31% on 6/25/2021.

### Hospitalizations

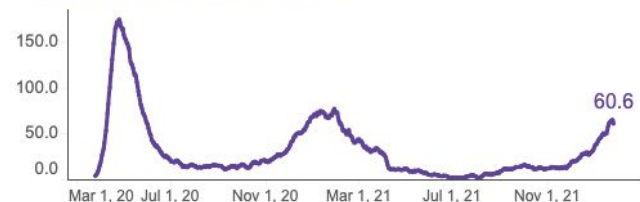
7-day average of hospitalizations



The lowest observed value was 84.8 on 7/9/2021.

### Deaths

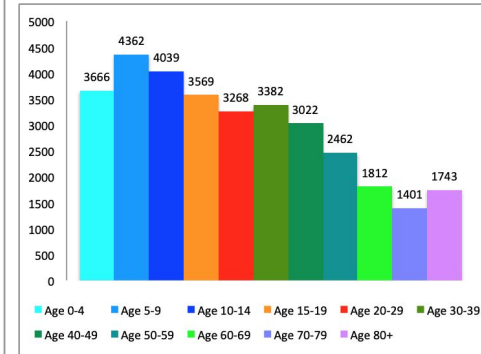
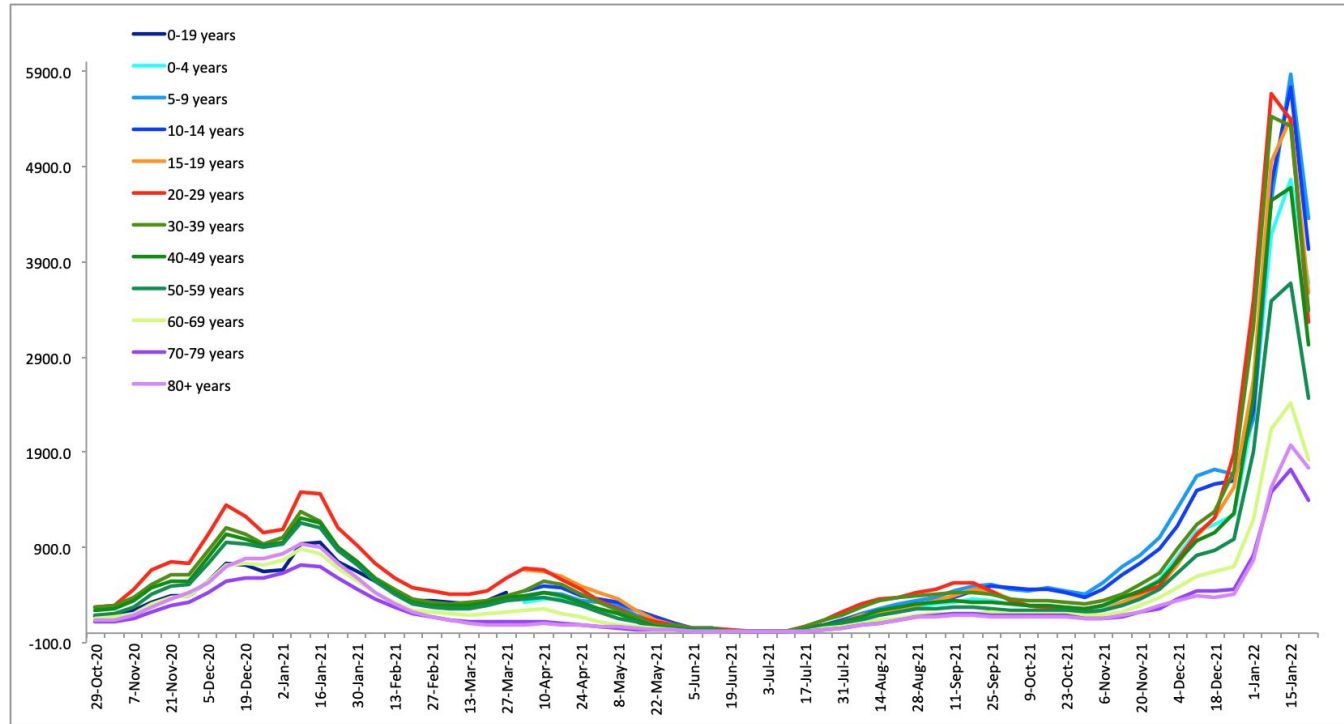
7-day average of confirmed deaths



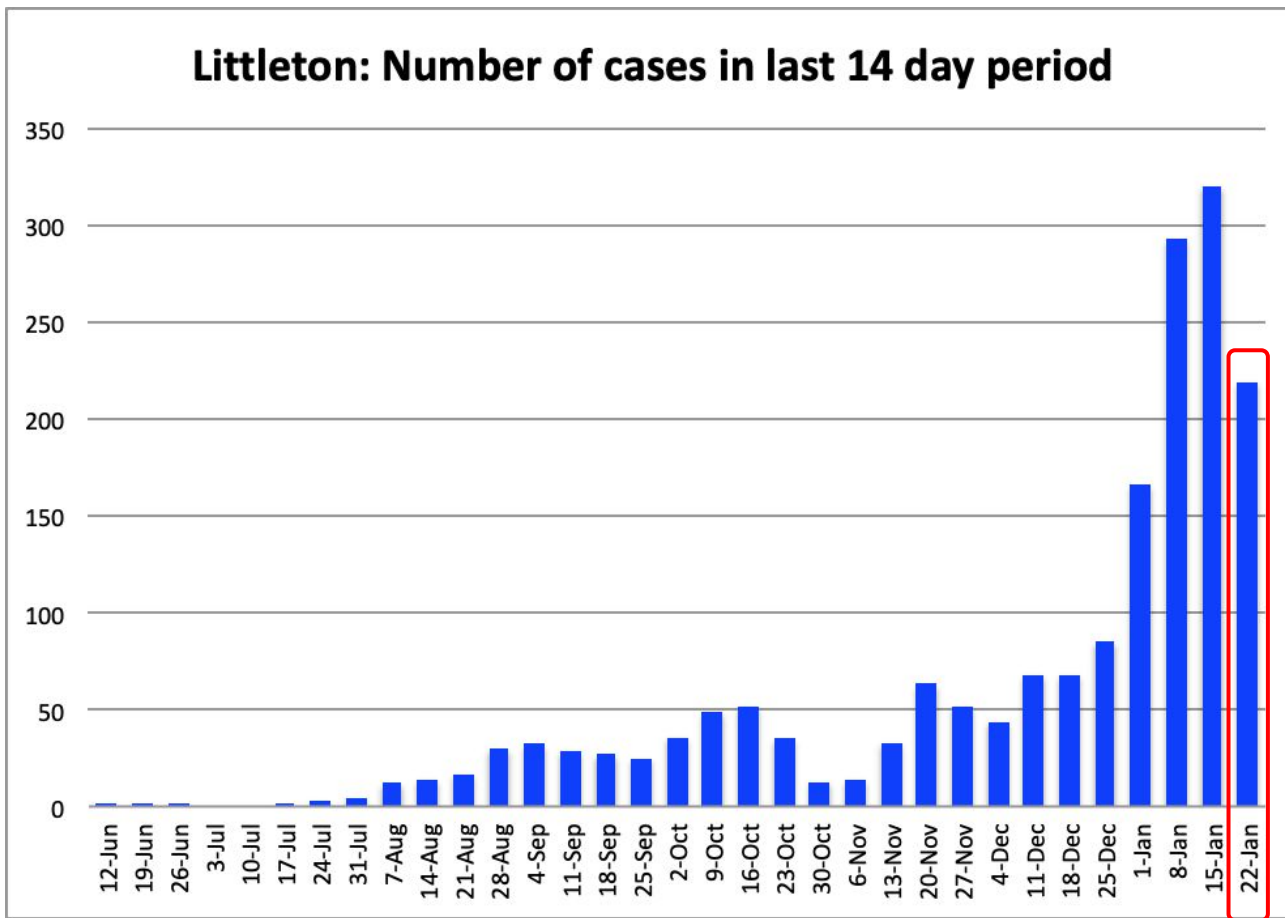
The lowest observed value was 1.3 on 7/11/2021.

The lowest observed value is since tracking of the lowest value began on April 15, 2020. For details on the definitions of each indicator please see the corresponding tab for that indicator. All data included in this dashboard are preliminary and subject to change. Data Sources: COVID-19 Data provided by the Bureau of Infectious Disease and Laboratory Sciences and the Registry of Vital Records and Statistics; Created by the Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences, Division of Surveillance, Analytics and Informatics.

# Covid Case Rate per 100k by Age Group



# Littleton Data



Data Source: MA DPH Covid Dashboard - [www.mass.gov/info-details/covid-19-response-reporting](http://www.mass.gov/info-details/covid-19-response-reporting) (City and Town Data) - accessed 1/27/22

# Littleton and Local Trends - Methods

## Town Groupings:

- **Littleton**
- **Border Towns** - Littleton plus Acton, Ayer, Boxborough, Groton, Harvard, Westford
- **Surrounding Communities** - Border Towns plus, Bolton, Carlisle, Chelmsford, Concord, Dunstable, Lancaster, Lunenburg, Maynard, Pepperell, Shirley, Stow
- **495 Belt** - Surrounding Communities plus Ashby, Bedford, Berlin, Boylston, Clinton, Hudson, Leominster, Lincoln, Lowell, Marlborough, Northborough, Shrewsbury, Southborough, Sterling, Sudbury, Townsend, Tyngsboro, Wayland, West Boylston, Westborough, Weston
- **Middlesex County**
- **Massachusetts**

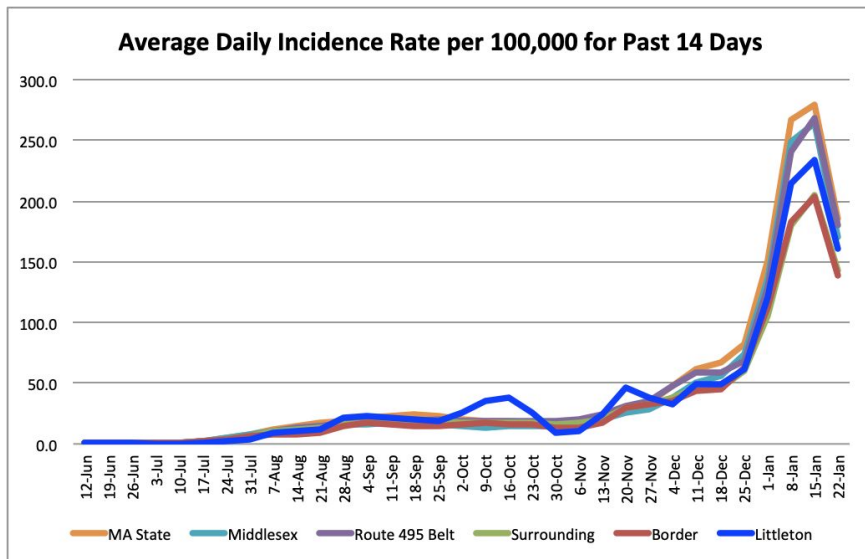
## Data Source and Time Period:

- MA DPH Covid Dashboard - [www.mass.gov/info-details/covid-19-response-reporting](http://www.mass.gov/info-details/covid-19-response-reporting), City and Town Data
- Two week period (Sunday to Saturday) ending the Saturday before the DPH report is released on Thursdays

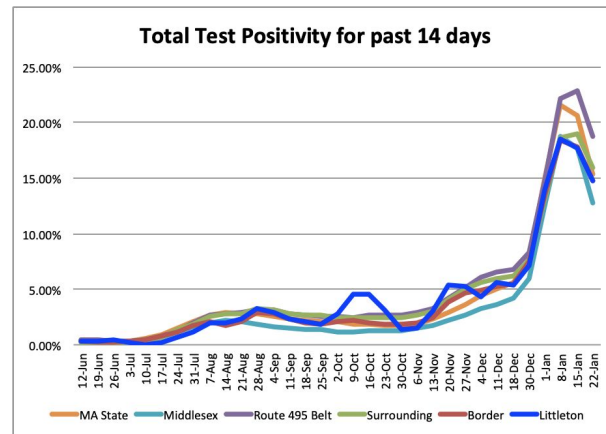
## Calculations:

- **Average Daily Incidence Rate** = ((total cases in two week period / 14 days) / population)\*100,000
- **Test Positivity** = total positive tests in last two week period / total tests conducted in last two week period

# Littleton and surrounding area - trends



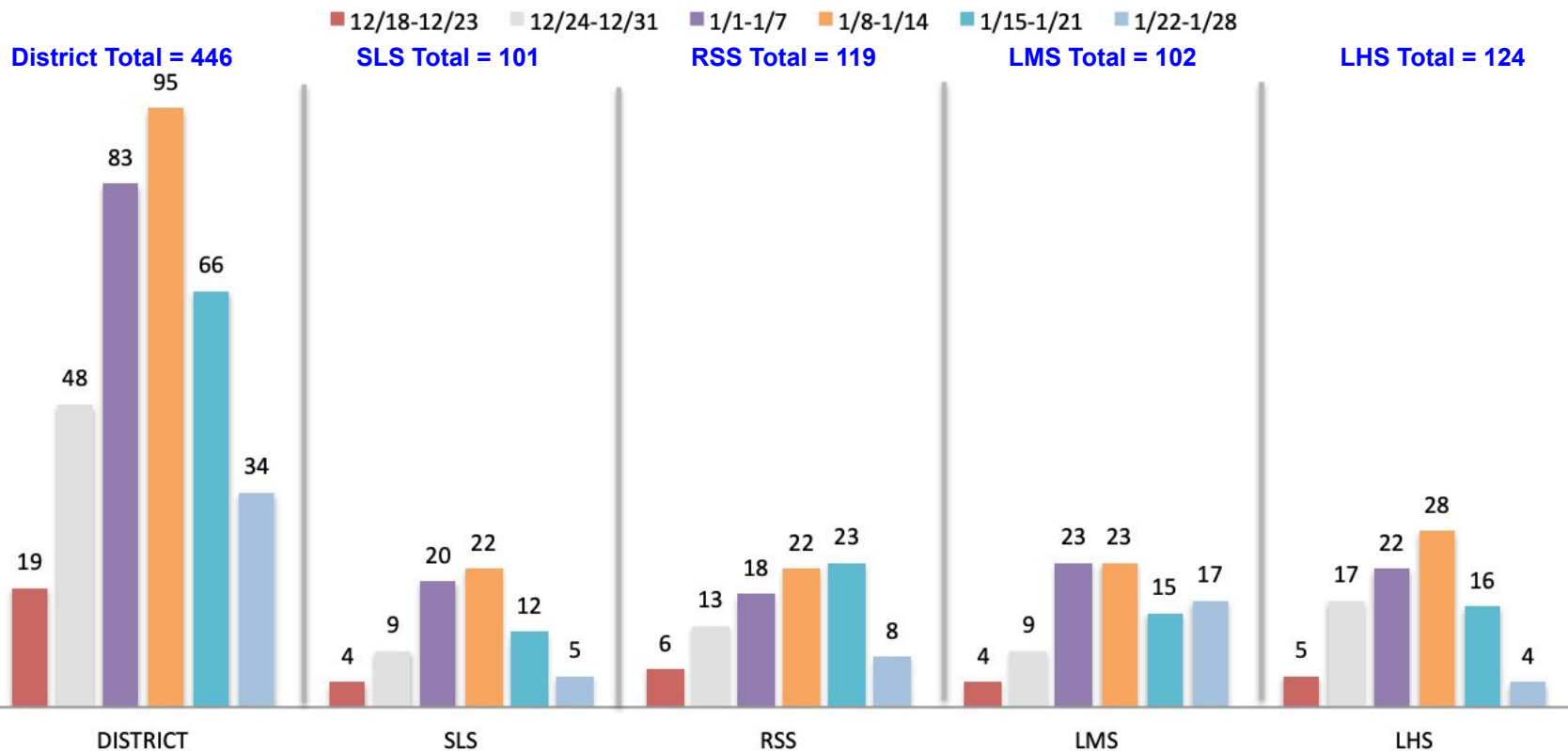
- Littleton's average daily incidence rate = 160.3 per 100k (lower)
- All other areas we track also trended lower
- Based on high test positivity, this is an undercount



- Test Positivity = Total Positive tests divided Total Tests Conducted and reporting
  - Dependent on access to tests, testing program dynamics, and reporting
  - **Indicates whether enough testing is being conducted and reported to calculate reliable case counts or rates**
  - When test positivity is high (>10%), indicates case counts or rates are an underestimate of true spread in the community
  - **Is NOT a proportion of the population infected**
- Littleton had 1618 tests conducted (lower)
- Littleton's test positivity = 14.71% (lower)
- Similar trend for other areas
- Indicates case counts are an underestimate of true community spread



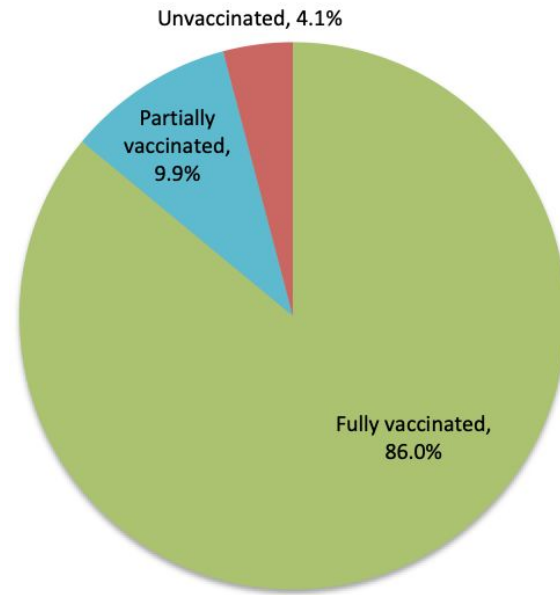
## LPS Covid-19 cases last 6 weeks



Data Sources: [Littleton Public Schools Covid-19 Dashboard](#) and LPS Health Notification Letters sent to parents as of 1/27/2022

# Littleton Vaccination Coverage

Age Group	Fully Vaccinated	Partially Vaccinated	Unvaccinated
0-4 years	Not eligible	Not eligible	Not eligible
5-11 years	575 (72%)	154 (19%)	70 (9%)
12-15 years	518 (>95%)	45 (9%)	*
16-19 years	474 (85%)	41 (7%)	44 (8%)
20-29 years	851 (94%)	140 (15%)	*
30-49 years	2154 (>95%)	216 (10%)	*
50-64 years	2209 (89%)	171 (7%)	108 (4%)
65-74 years	982 (>95%)	99 (10%)	*
75+ years	627 (80%)	93 (12%)	65 (8%)
<b>Total</b>	<b>8390 (86.0%)</b>	<b>966 (9.9%)</b>	<b>400 (4.1%)</b>



Data Source:  
 MA DPH Weekly Covid-19 municipality vaccination data - [www.mass.gov/info-details/massachusetts-covid-19-vaccination-data-and-updates](https://www.mass.gov/info-details/massachusetts-covid-19-vaccination-data-and-updates) - accessed 1/27/22  
 Note: 0-4 data imputed based on population and eligibility.

# Littleton Vaccination - Boosters

Age Group	Booster Eligible (Full Vax >5 mo)* N fully vax who are booster eligible / N fully vax (% booster eligible)	Boosted N (% eligible who were boosted by 1/20/2022)	Remaining eligible booster targets as of 1/20/2022 N (% eligible)
12-15	394 / 518 (76%) authorized 1/5/22	196 (50%)	198 (50%)
16-19	415 / 474 (88%)	294 (71%)	121 (29%)
20-29	743 / 851 (87%)	473 (64%)	270 (36%)
30-49	1893 / 2154 (88%)	1405 (74%)	488 (26%)
50-64	2096 / 2209 (95%)	1558 (74%)	538 (26%)
65-74	916 / 982 (93%)	809 (88%)	107 (12%)
75+	560 / 627 (89%)	468 (84%)	92 (16%)
<b>Total</b>	<b>7017 / 8390 (84%) are eligible for boosters*</b>	<b>5203 (74%) of eligible residents have been boosted</b>	<b>1814 (26%) are eligible, but not yet boosted</b>

\* conservative estimate because individuals vaccinated with J&J eligible >2 months after vaccination  
Data from 1/27/2022 DPH report

# Wear a mask with the best fit, protection, and comfort for you.



## N95 Respirator

NIOSH-approved

When worn correctly, respirators offer the highest level of protection and filter 95% of particles.



## KN95 Respirator

Filtration varies depending on standard.

When worn correctly, KN95s provide more protection than disposable masks.



## Disposable Mask

Sometimes referred to as "surgical masks" or "medical procedure masks"

Disposable masks offer more protection than cloth masks.



## Cloth Mask

Non-medical, made of fabric

Layered finely woven cloth masks offer more protection.

Loosely woven cloth masks provide the least protection.



Masks and respirators should not be worn by children younger than 2 years old.

[cdc.gov/coronavirus](https://cdc.gov/coronavirus)

**v-safe**  
after vaccination  
health checker



# 8.7 million\* COVID-19 vaccinations have been given to children ages 5-11 years old

Health check-ins to v-safe completed for over 42,000 children after vaccination<sup>†</sup>

## Side effects were common but mild and brief<sup>§</sup>



Pain where shot was given



Fatigue



Headache



Mild side effects are a normal sign the body is building protection



Few myocarditis cases have been reported



Vaccination is the best way to protect children from COVID-19 complications



\* As of December 19, 2021

<sup>†</sup> V-safe, a voluntary smartphone vaccine safety monitoring system

<sup>§</sup> After the 2nd dose, about 2/3 children had a local reaction such as arm pain; 1/3 had a reaction beyond the injection site

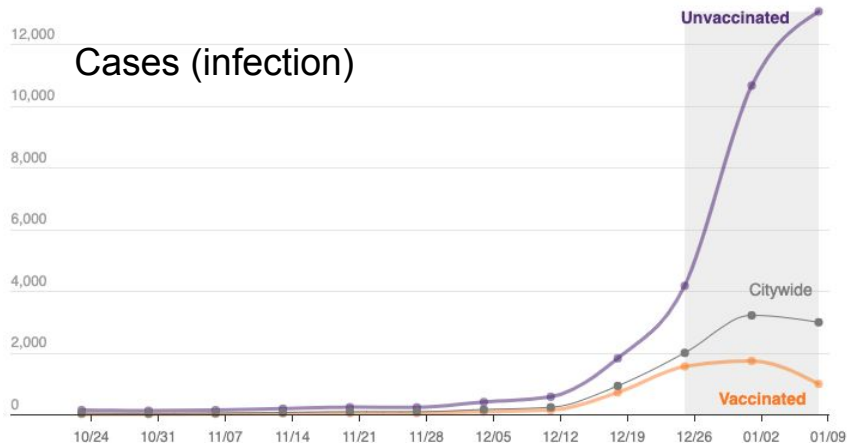
[bit.ly/MMWR705152a1](https://bit.ly/MMWR705152a1)

**MMWR**

# NYC Health Data: Covid-19 vaccines prevent infection, hospitalization, and death

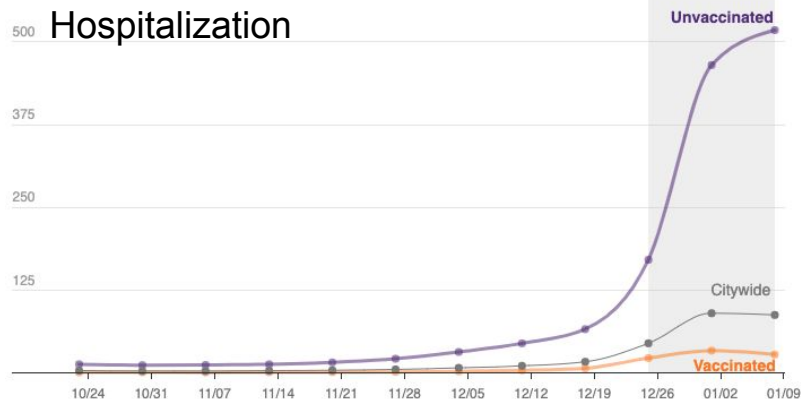
Cases per 100,000 people (for week ending on listed date)

Recent data may be incomplete.



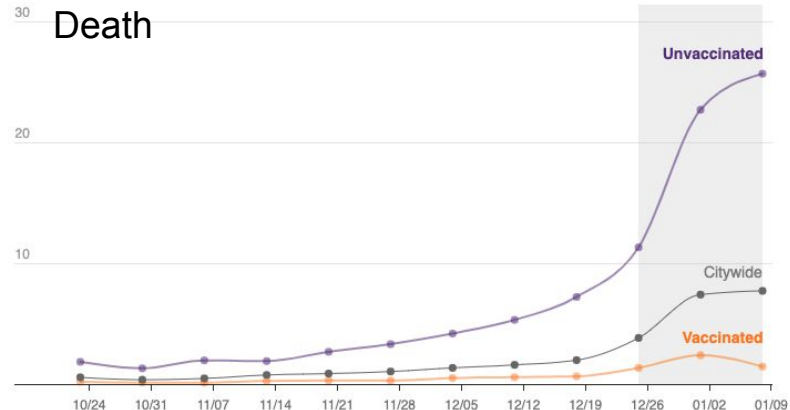
Hospitalizations per 100,000 people (age-adjusted, for week ending on listed date)

Recent data may be incomplete.



Deaths per 100,000 people (age-adjusted, for week ending on listed date)

Recent data may be incomplete.





# Updated MA Isolation and Quarantine Guidance Available

## COVID-19 Isolation and Quarantine Guidance for the General Public

Isolation and quarantine are important steps to help stop the spread of COVID-19.

### If you test positive for COVID-19 (isolate)

If you test positive for COVID-19 on either a rapid antigen or PCR test, you are required to self-isolate – **whether you are vaccinated or not**. Do not leave your home, except to get medical care. Do not visit public areas. Self-isolation means separating yourself from others to keep your germs from spreading. Regardless of vaccination status, all individuals who test positive should avoid people who are at high risk of severe disease for 10 days.

Able to Mask***	Isolation Guidance
Yes	• Stay home and isolate for at least the first 5 days
	• If you never had symptoms or symptoms are improving,* may resume most usual activities (except those that do not allow mask wearing) on day 6**
Anyone who lives or goes to school in MA	• Wear a mask around others for 10 days (including in the household)
	• Stay home and isolate for 10 days
No	• If you never had symptoms or symptoms are improving,* you may resume usual activities on day 11
	• Wear a mask around others in the household for 10 days

\*Note: If you have or develop symptoms, you must continue to stay home, potentially beyond the 5 or 10 days, until you have not had a fever for 24-hours without the use of fever reducing medicine and your other symptoms are improving.

\*\* Testing during isolation is not required. If you test on day 5 and are positive, you must continue to isolate. You may choose to retest sometime between days 6-9 and can resume normal activities while wearing a mask when you test negative or isolate for the full 10 days without retesting.

\*\*\*Whether the individual is unable to consistently wear a mask due to young age or medical or behavioral condition

# If you were exposed to someone with COVID-19 (quarantine)

If you are a close contact of someone with COVID, follow the quarantine recommendations below based on your vaccination status and your ability to wear a well-fitting mask consistently and correctly. Regardless of vaccination status, if you were infected with COVID-19 in the prior 90 days you should follow the guidance for those up-to-date on vaccinations; however, testing is not recommended unless you have symptoms, and if you do have symptoms, a rapid antigen test is recommended. All close contacts should avoid people who are at high risk of severe disease for 10 days.

Vaccination Status	Able to Mask**	Quarantine Guidance
Up-to-date* on COVID-19 Vaccinations	Yes	<ul style="list-style-type: none"><li>• No quarantine requirement</li><li>• Wear a mask around others for 10 days (including in the household).</li><li>• Rapid antigen or PCR on day 5. If positive test, follow Isolation Guidance.</li><li>• Isolate and take a rapid antigen or PCR test anytime symptoms develop. If positive test, follow Isolation Guidance.</li></ul>
		<ul style="list-style-type: none"><li>• Quarantine for 10 days after the exposure</li><li>• Can end quarantine prior to day 10 if test negative on or after Day 5</li></ul>
		<ul style="list-style-type: none"><li>• If positive test, follow Isolation Guidance. If no test on or after day 5, must quarantine full 10 days</li><li>• Isolate and take a rapid antigen or PCR test anytime symptoms develop. If positive test, follow Isolation Guidance.</li></ul>
	No	<ul style="list-style-type: none"><li>• Quarantine for 10 days after the exposure</li><li>• Can end quarantine prior to day 10 if test negative on or after Day 5</li><li>• If positive test, follow Isolation Guidance. If no test on or after day 5, must quarantine full 10 days</li><li>• Isolate and take a rapid antigen or PCR test anytime symptoms develop. If positive test, follow Isolation Guidance.</li></ul>

Vaccination Status	Able to Mask**	Quarantine Guidance
Not up-to-date* on COVID-19 Vaccinations or Unvaccinated	Yes	<ul style="list-style-type: none"><li>• Quarantine for 5 days after the exposure</li><li>• Wear a mask during quarantine and for an additional 5 days when around others (including in the household).</li><li>• Take a rapid antigen or PCR test on day 5. If positive test, follow Isolation Guidance.</li><li>• Isolate and take a rapid antigen or PCR test anytime symptoms develop. If positive test, follow Isolation Guidance.</li></ul>
		<ul style="list-style-type: none"><li>• Quarantine for 10 days after the exposure</li><li>• Can end quarantine prior to day 10 if test negative on or after Day 5</li></ul>
		<ul style="list-style-type: none"><li>• If positive test, follow Isolation Guidance. If no test on or after day 5, must quarantine full 10 days.</li><li>• Isolate and take a rapid antigen or PCR test anytime symptoms develop. If positive test, follow Isolation Guidance.</li></ul>
	No	<ul style="list-style-type: none"><li>• Quarantine for 10 days after the exposure</li><li>• Can end quarantine prior to day 10 if test negative on or after Day 5</li><li>• If positive test, follow Isolation Guidance. If no test on or after day 5, must quarantine full 10 days.</li><li>• Isolate and take a rapid antigen or PCR test anytime symptoms develop. If positive test, follow Isolation Guidance.</li></ul>

\* "Up-to-date" on COVID-19 Vaccinations is defined as:

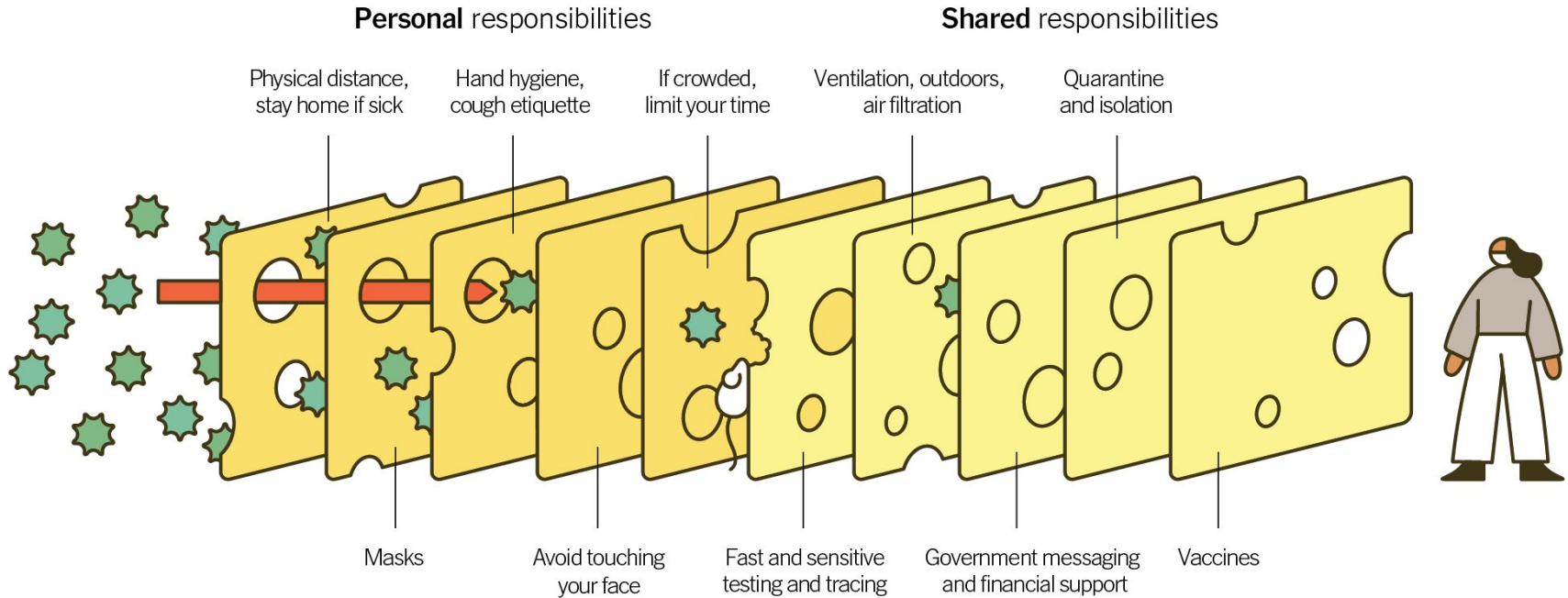
- Completed the primary series of Pfizer, Moderna or J&J vaccine AND a booster dose OR
- Completed the primary series of Pfizer or Moderna vaccine within the last 5 months OR
- Completed the primary series of J&J vaccine within the last 2 months

\*\* Whether the individual is unable to consistently wear a mask due to young age or medical or behavioral condition



# Multiple Layers Improve Success

The Swiss Cheese Respiratory Pandemic Defense recognizes that no single intervention is perfect at preventing the spread of the coronavirus. Each intervention (layer) has holes.



Source: Adapted from Ian M. Mackay (virologydownunder.com) and James T. Reason. Illustration by Rose Wong

Image from: [www.nytimes.com/2020/12/05/health/coronavirus-swiss-cheese-infection-mackay.html](https://www.nytimes.com/2020/12/05/health/coronavirus-swiss-cheese-infection-mackay.html)