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February 24, 2021

COVID-19 LIVE Webinar

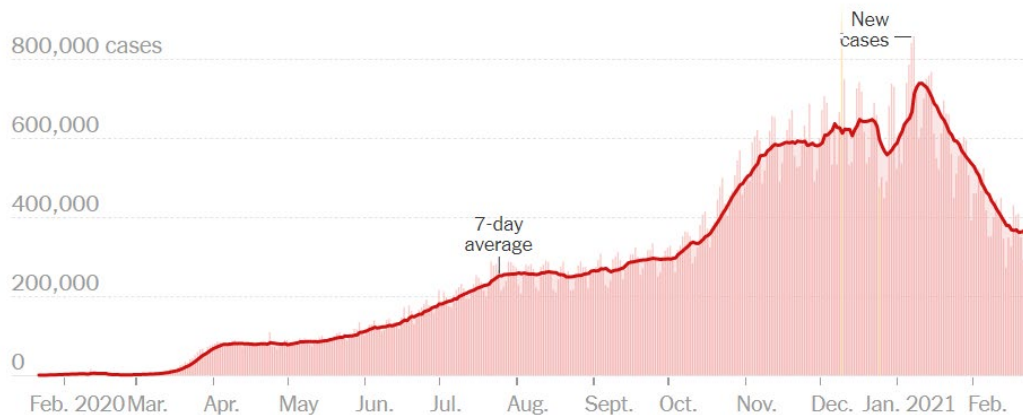
COVID-19: Where Are We Today?

Key Points

- Overall, COVID-19 data is improving
- Vaccines are safe and effective
 - Get your vaccine now if you have not already done so!
- Practice the CORE FOUR

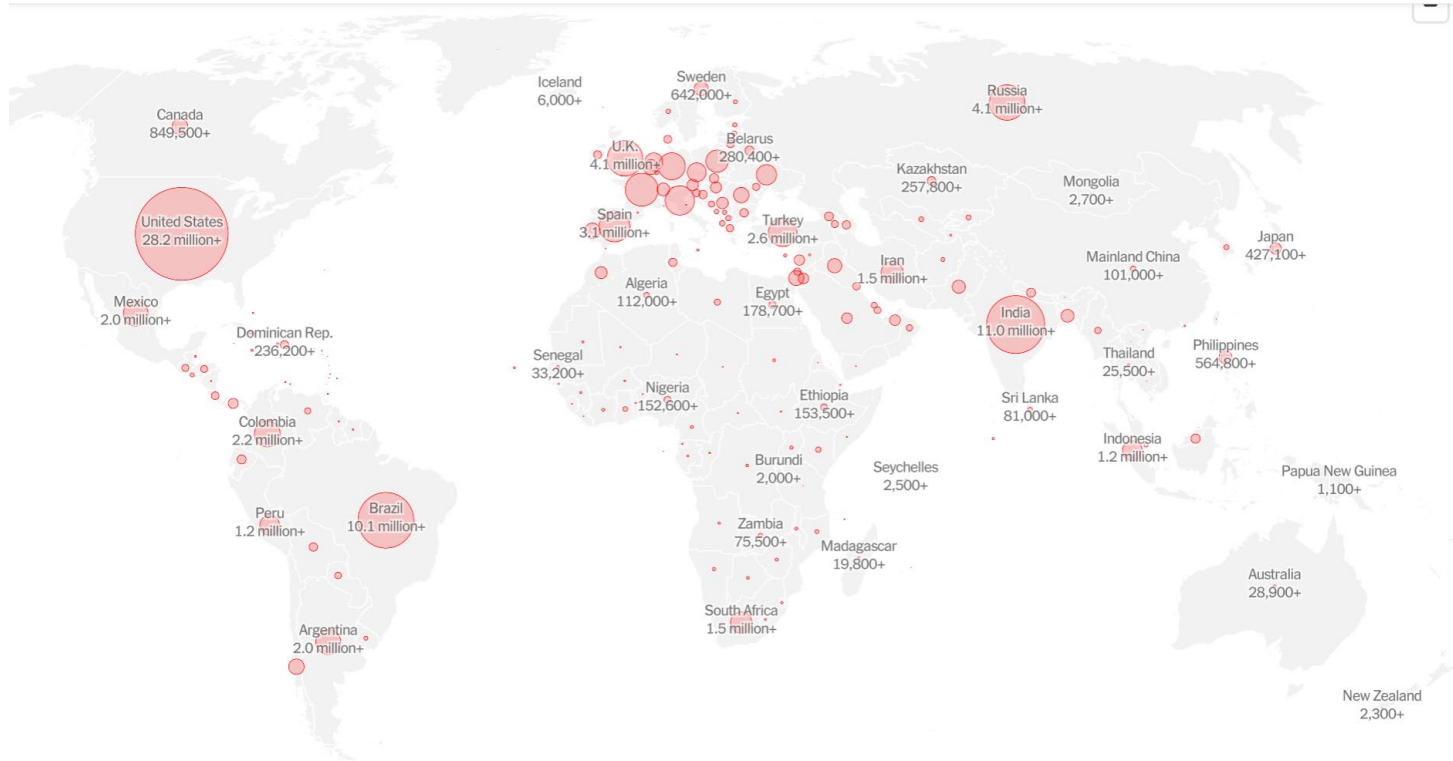
Worldwide COVID-19 Data

Updated February 23, 2021, 2:26 P.M. E.T.



	TOTAL REPORTED	ON FEB. 22	14-DAY CHANGE
Cases	111.8 million+	287,166	-19% →
Deaths	2.4 million+	6,753	-25% →

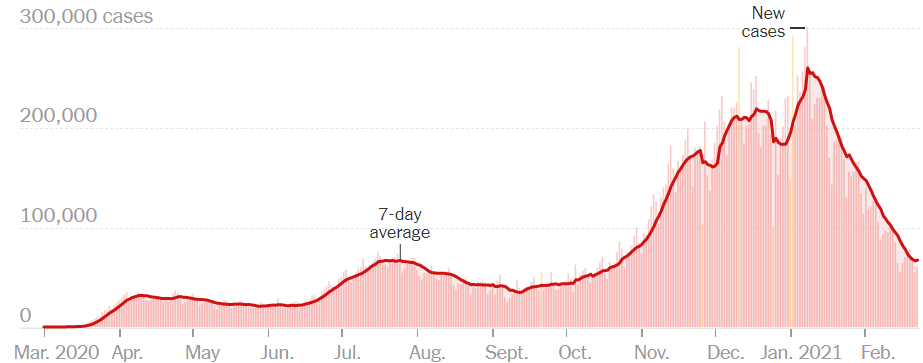
Worldwide COVID-19 Cases by Country



US COVID-19 Data

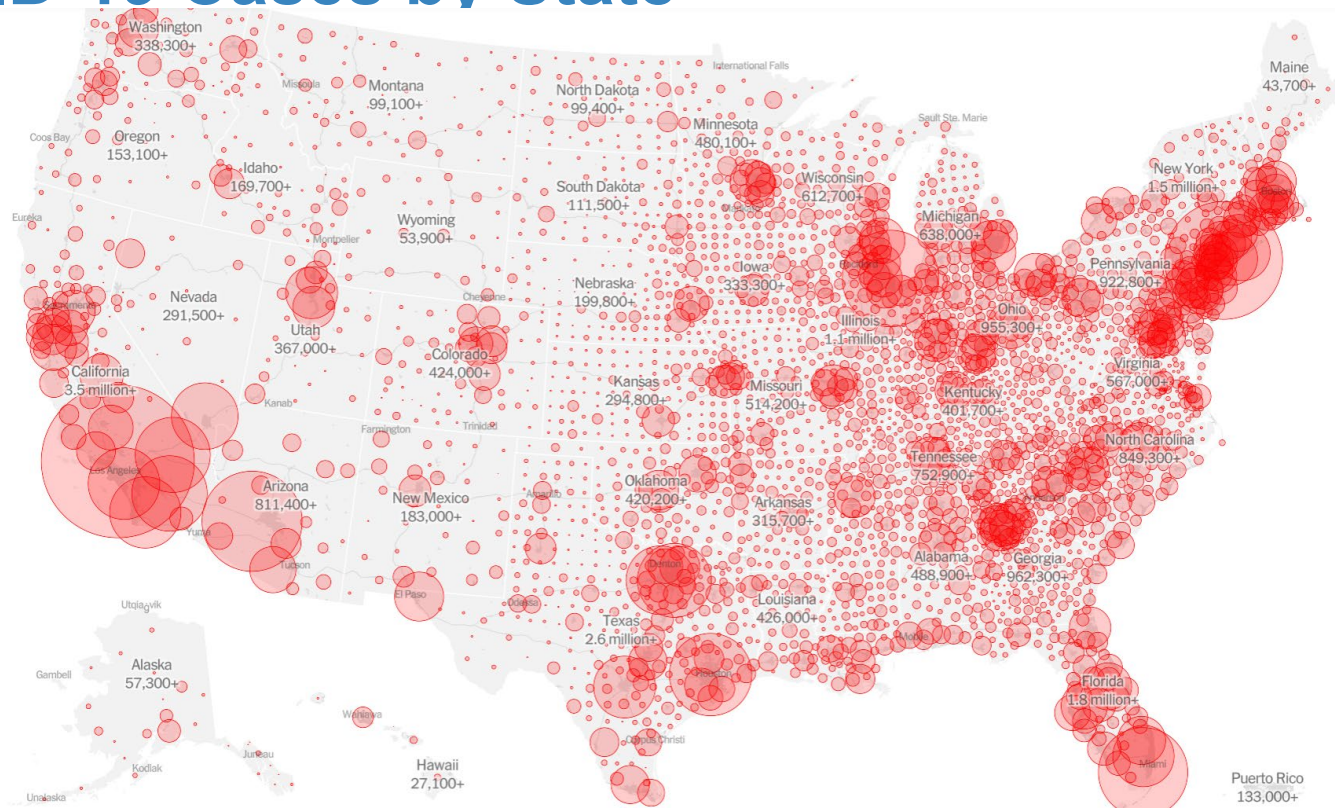
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[Leer en español](#)



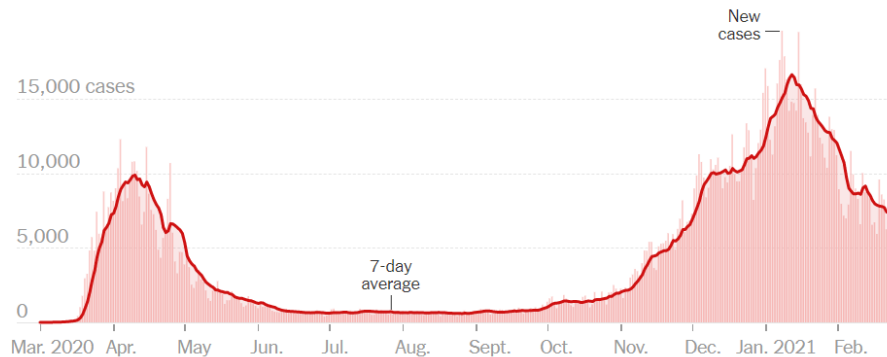
	TOTAL REPORTED	ON FEB. 22	14-DAY CHANGE
Cases	28.2 million+	59,462	-40% ↘
Deaths	501,044	1,454	-28% ↘
Hospitalized		55,403	-31% ↘

US COVID-19 Cases by State



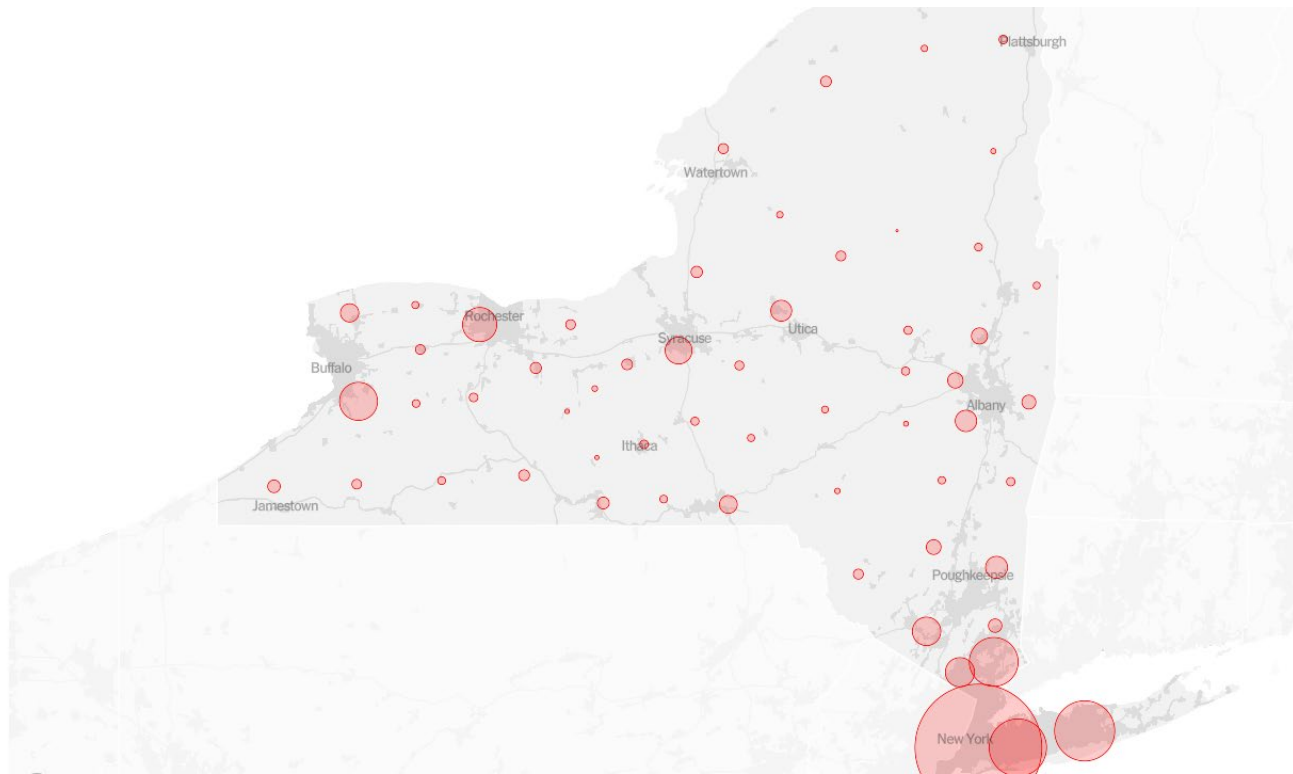
NY State COVID-19 Data

Updated February 23, 2021, 2:26 P.M. E.T.



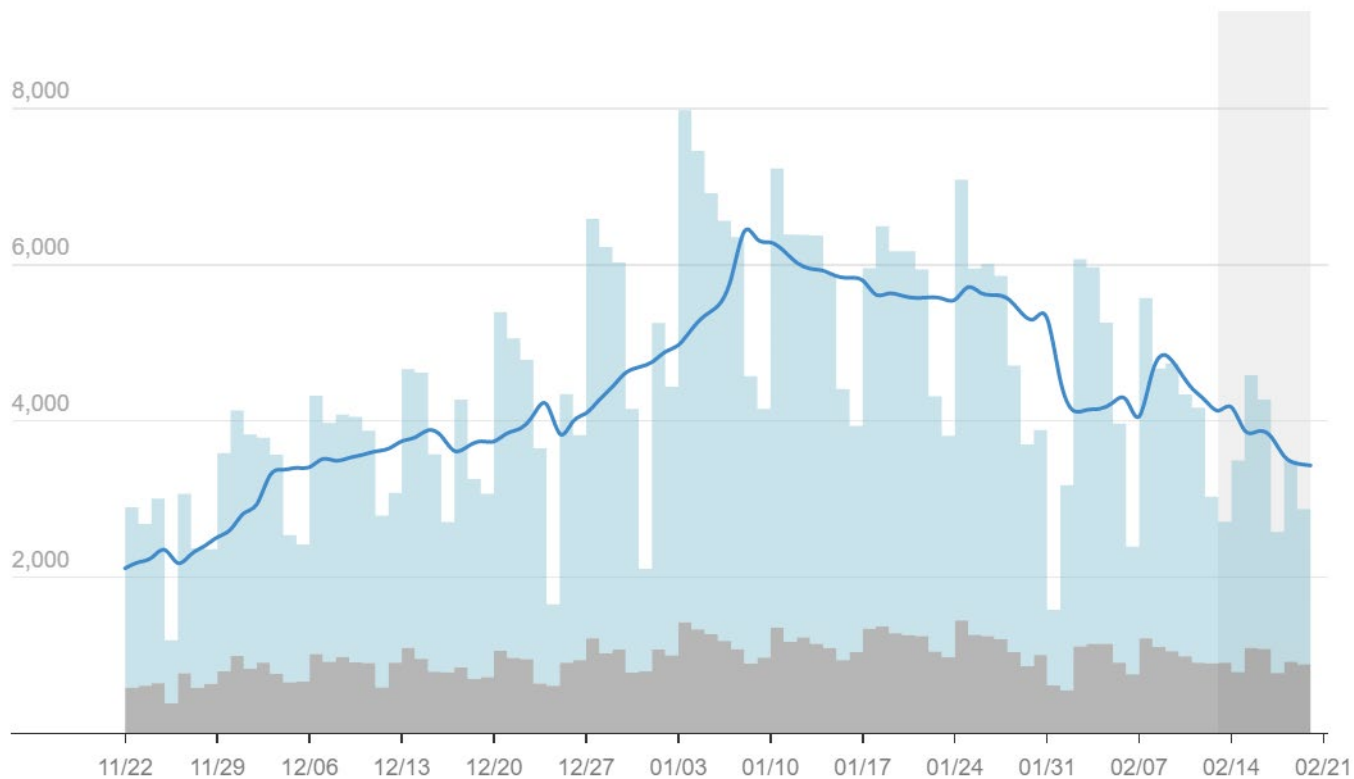
	TOTAL REPORTED	ON FEB. 22	14-DAY CHANGE
Cases	1.5 million+	6,297	-15% →
Deaths	46,454	108	-22% →
Hospitalized		5,804	-22% →

NY State COVID-19 Cases by Region



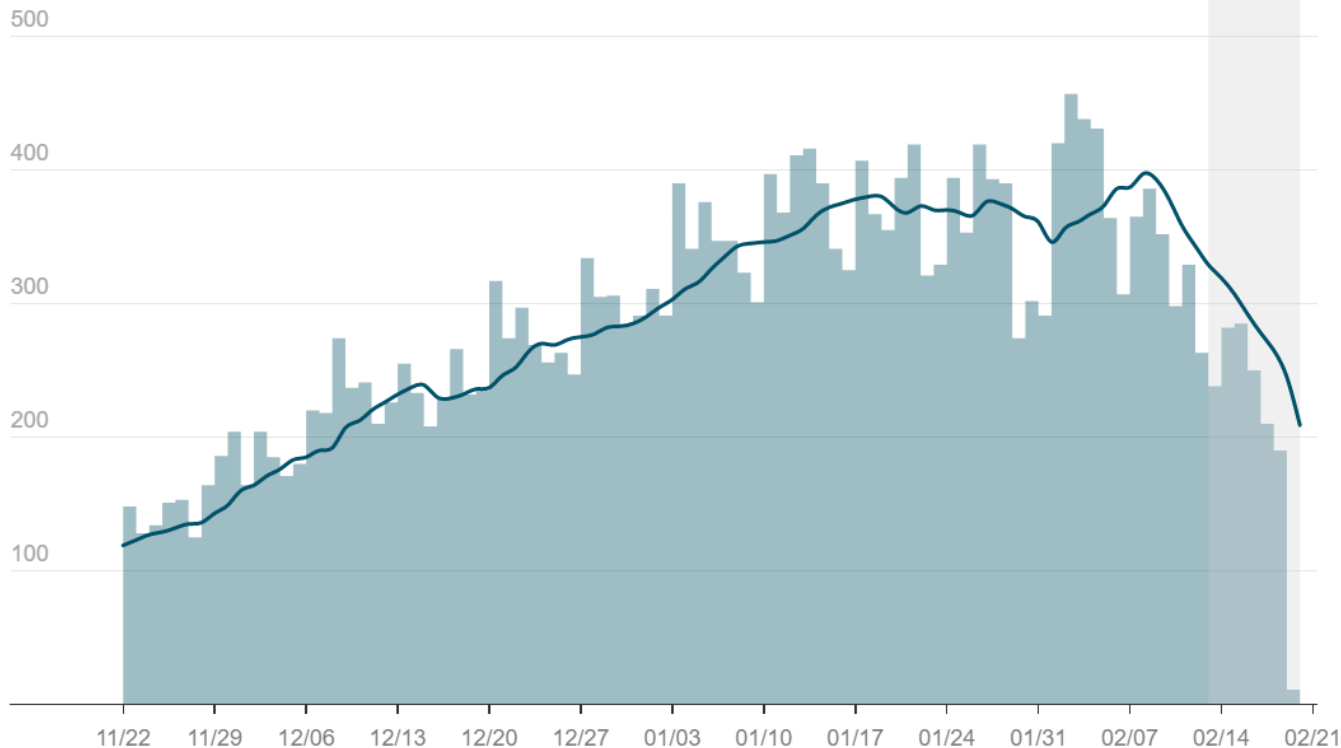
Citywide: cases

Data from the most recent days are incomplete.



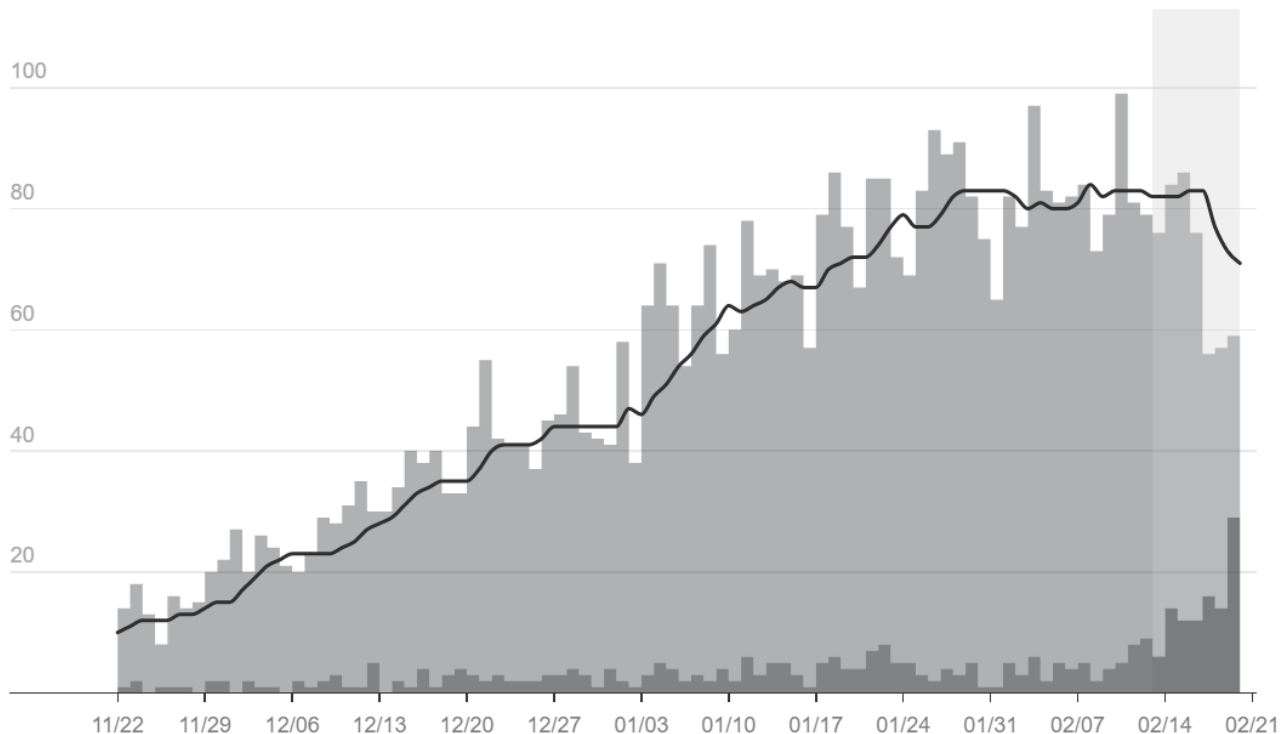
Citywide: hospitalizations

Data from the most recent days are incomplete.

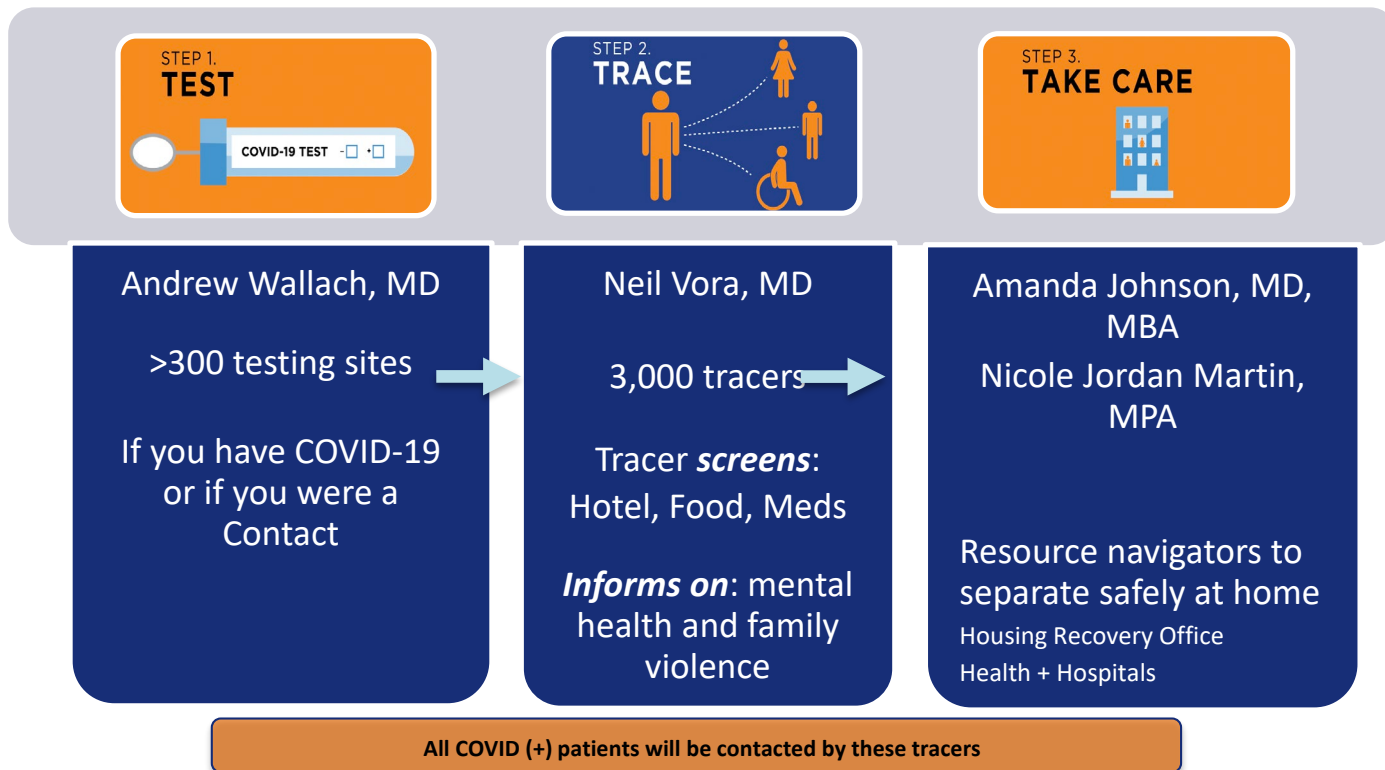


Citywide: deaths

Data from the most recent days are incomplete.

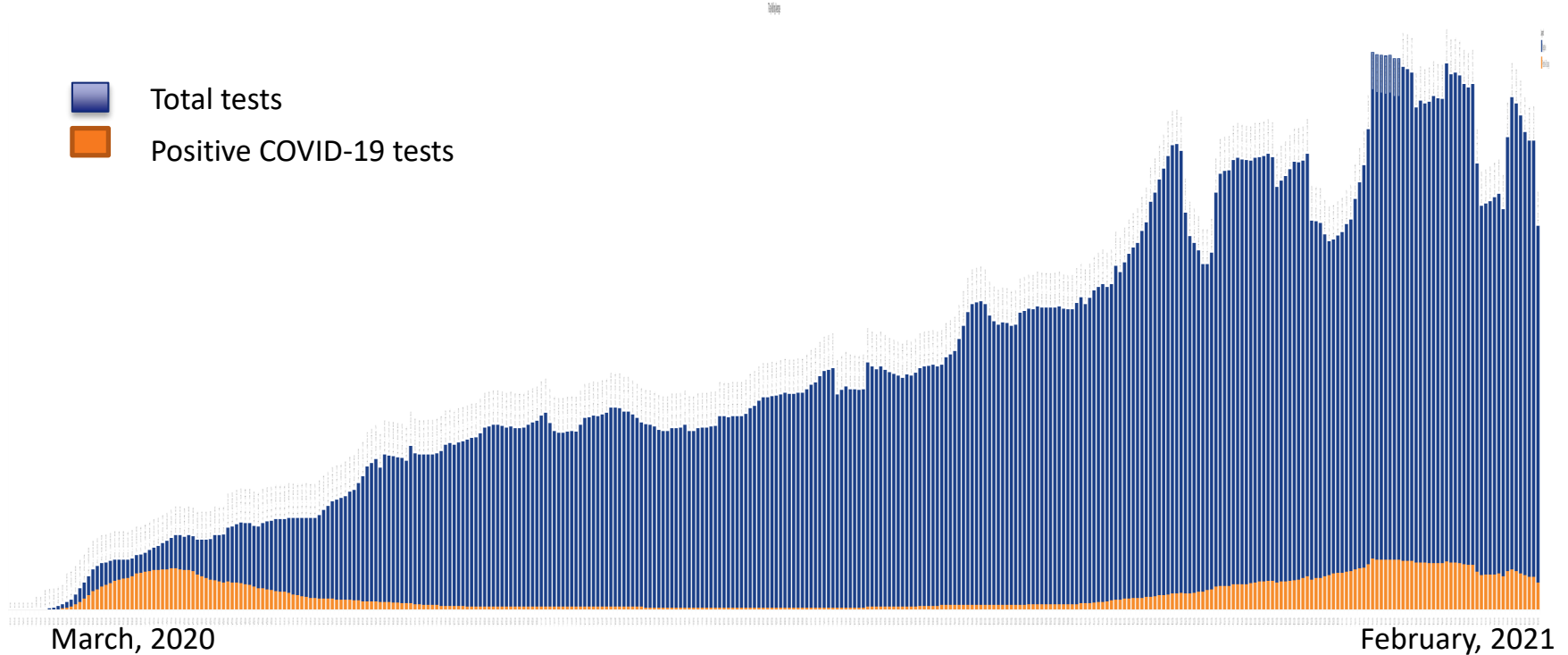


NYC Test & Trace Corps



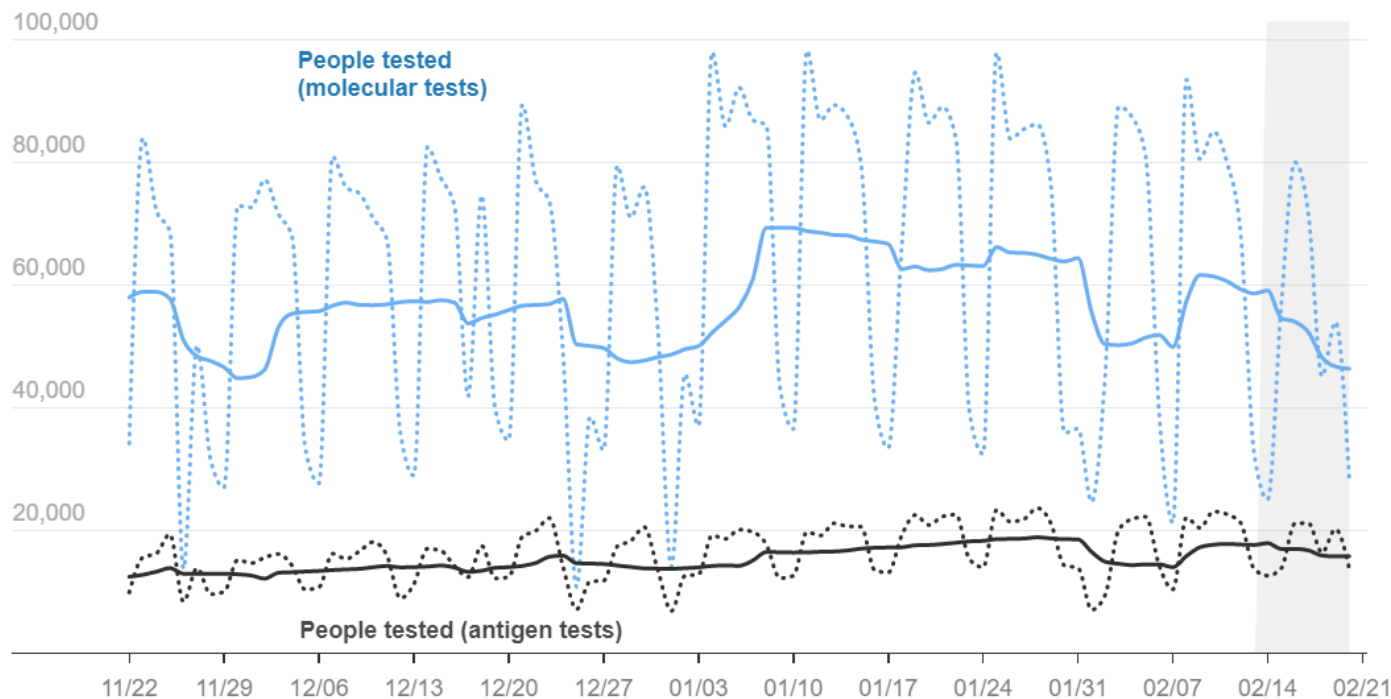
NYC Testing

- Total tests
- Positive COVID-19 tests

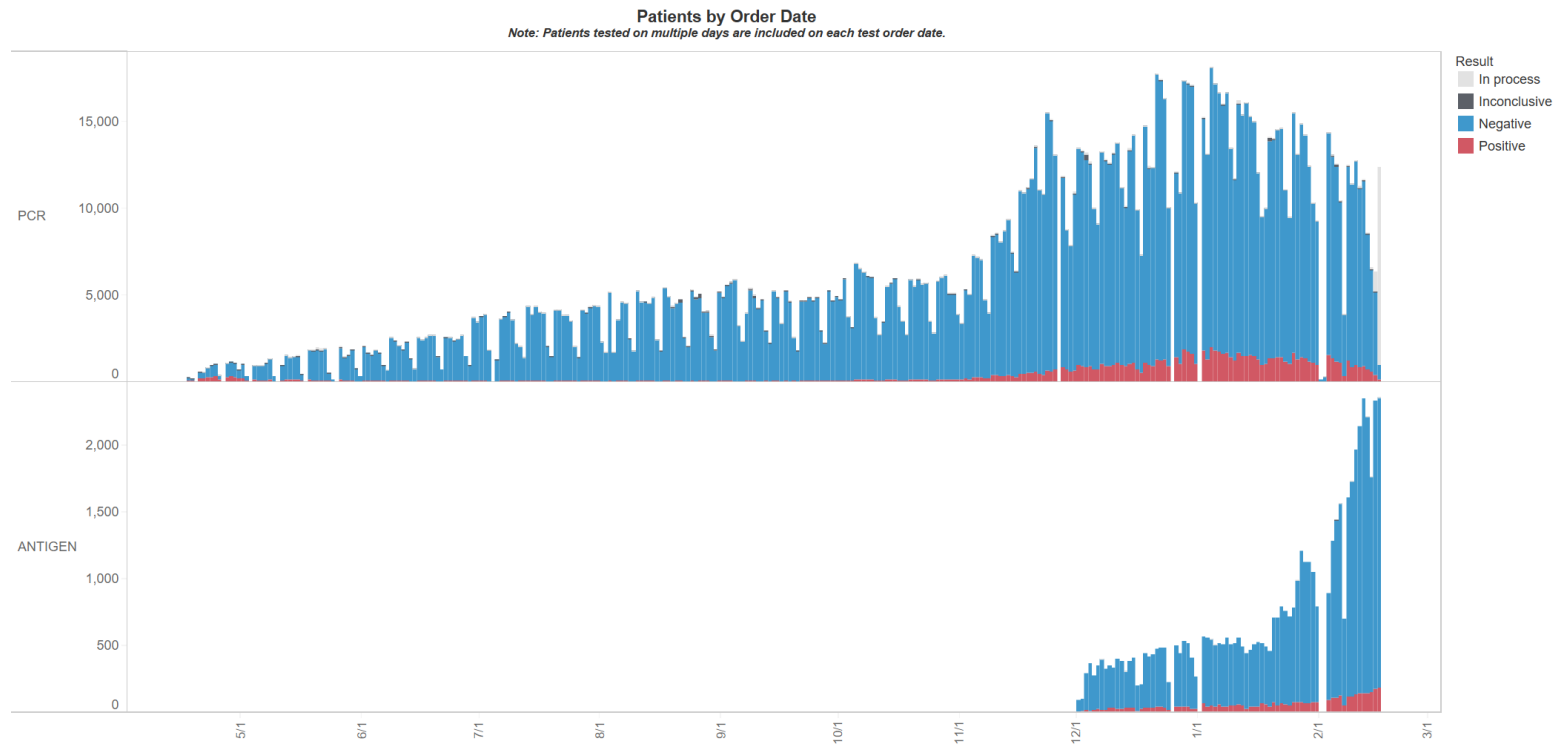


NYC Testing By Type

Data from the most recent days are incomplete.



NYC Health + Hospitals Testing By Type

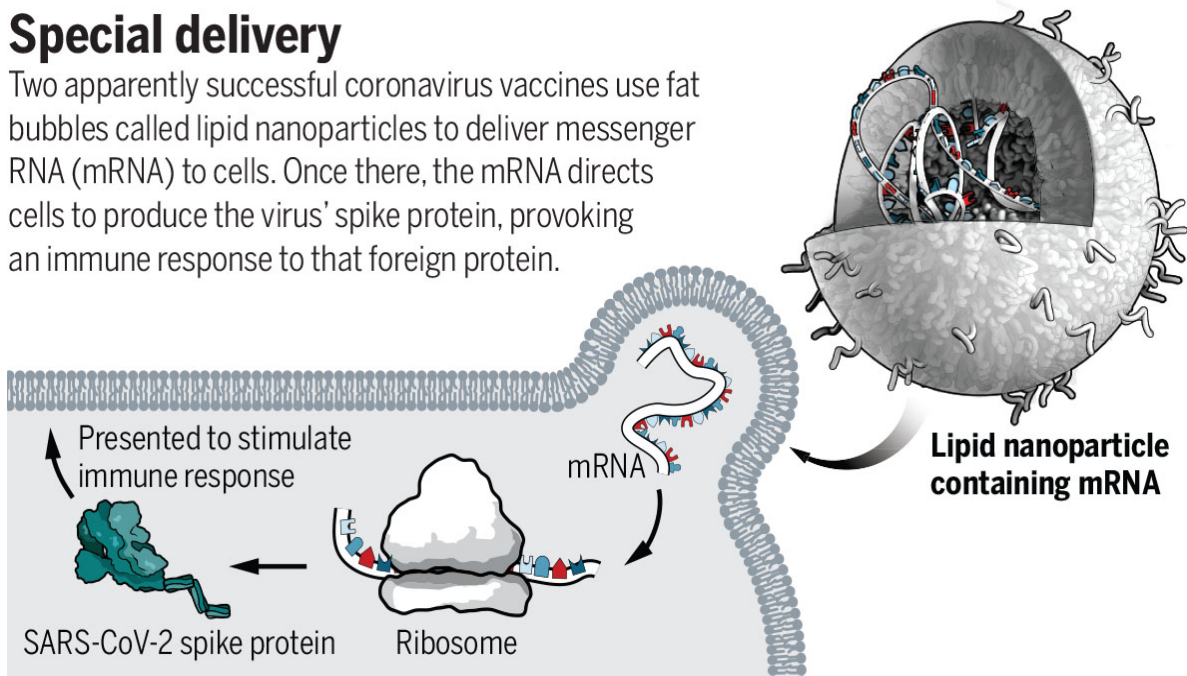


Vaccines 101

- Traditionally, weakened form of a virus or bacteria injected into the body to create an immune response (MMR/Pneumovax)
- mRNA vaccines use part of the virus' own genetic code to instruct cells to produce a protein that stimulate an immune response

Special delivery

Two apparently successful coronavirus vaccines use fat bubbles called lipid nanoparticles to deliver messenger RNA (mRNA) to cells. Once there, the mRNA directs cells to produce the virus' spike protein, provoking an immune response to that foreign protein.



COVID-19 mRNA Vaccines

- Pfizer
- Moderna

- Prior research led to expedited timetable for development and clinical trials
- mRNA vaccines are ‘recipes’ for spike protein production

COVID-19 Vaccines

- Vaccine distribution controlled by Health Departments initially
- Two doses will be required (from same facility)
 - Johnson & Johnson: 1 dose only
- Intramuscular administration
- Products will not be interchangeable
- Voluntary
- Appear safe in the long term-continuing to monitor

COVID-19 Vaccine Safety

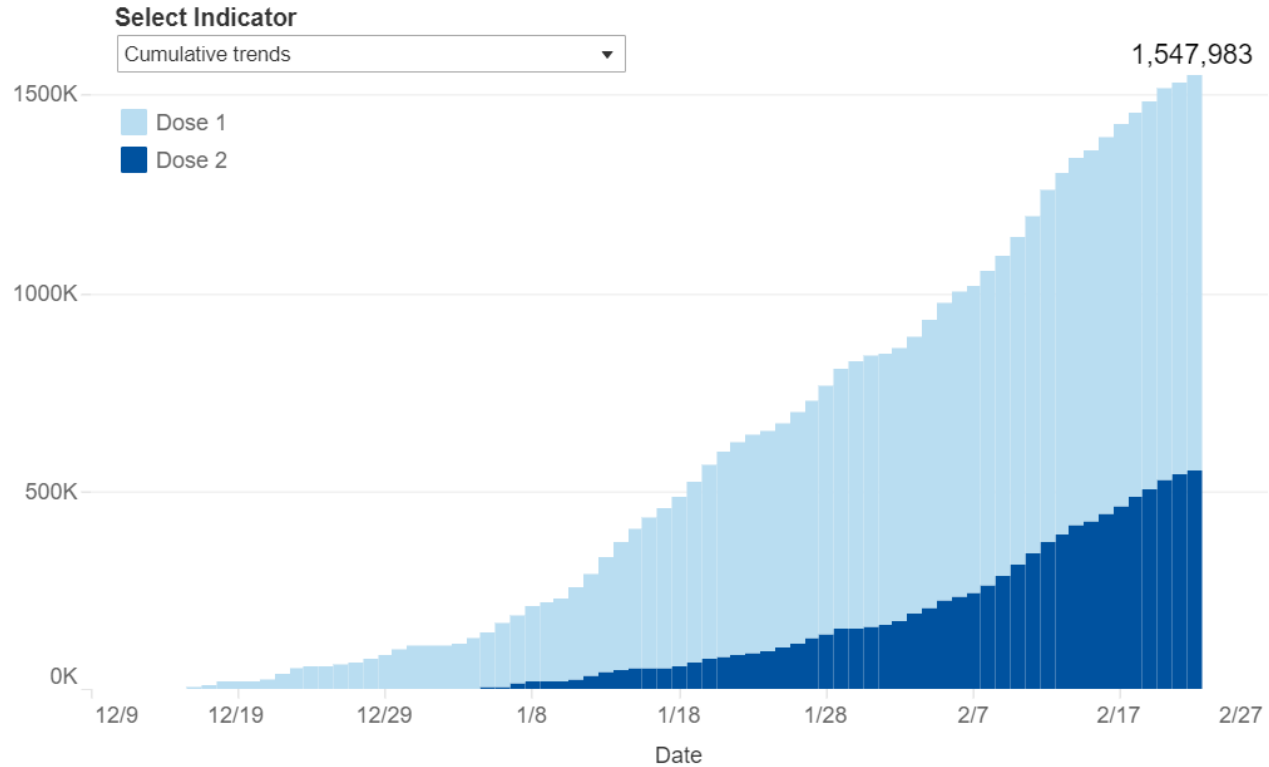
- Large clinical trials
- Real-world usage

- Rare anaphylactic reactions
- High rates of temporary and unpleasant- but not dangerous- side effects

COVID-19 Common Side Effects

- Pain
- Swelling
- Fever
- Chills
- Tiredness
- Headache

NYC Vaccinations



Get Vaccinated Now!

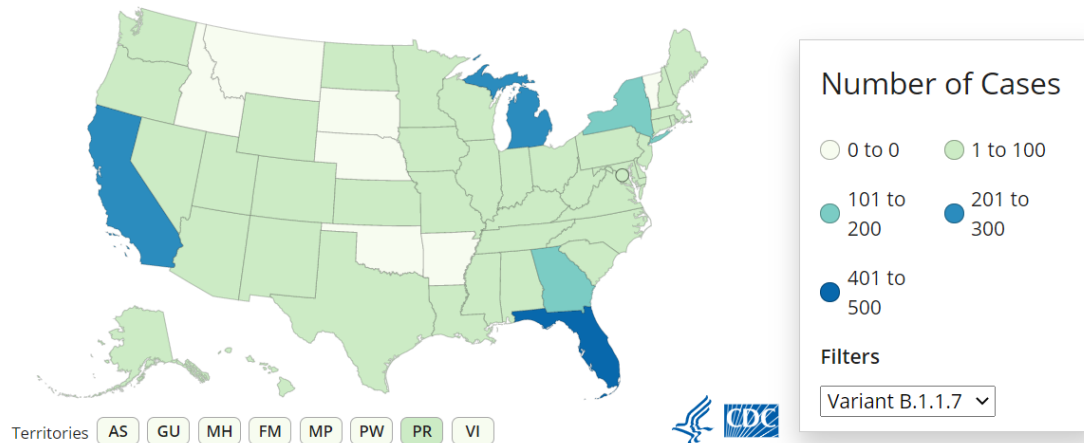


SARS-CoV-2 Variants

- **England (B.1.1.7)**
- **South Africa (B.1.351)**
- **Brazil (P.1)**

Variant	Reported Cases in US	Number of States Reporting
B.1.1.7	1881	45
B.1.351	46	14
P.1	5	4

Emerging Variant Cases in the United States**



Variant Strains: What We Know

- Spread more easily and quickly
- Antibodies produced by current vaccines appear to recognize these variants
- Importance of public health mitigation strategies

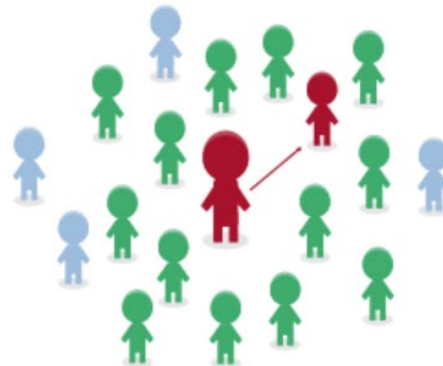
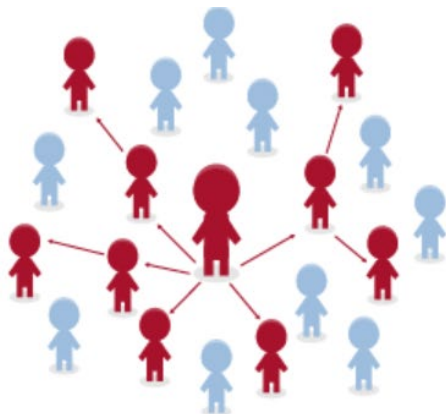
Variant Strains: What We Don't Know

- How widely these variants have spread
- How disease caused by these new variants may differ from disease caused by original strains
- How these variants may affect existing testing, therapies and vaccines

Herd Immunity

- Occurs when virus can't spread because it encounters enough individuals who are protected against the infection
 - By prior disease or by vaccination
- Once sufficient people in a population are no longer susceptible, the outbreak peters out
 - Estimate 60-70% for SARS-CoV-2

Herd Immunity



No herd immunity

Herd immunity achieved

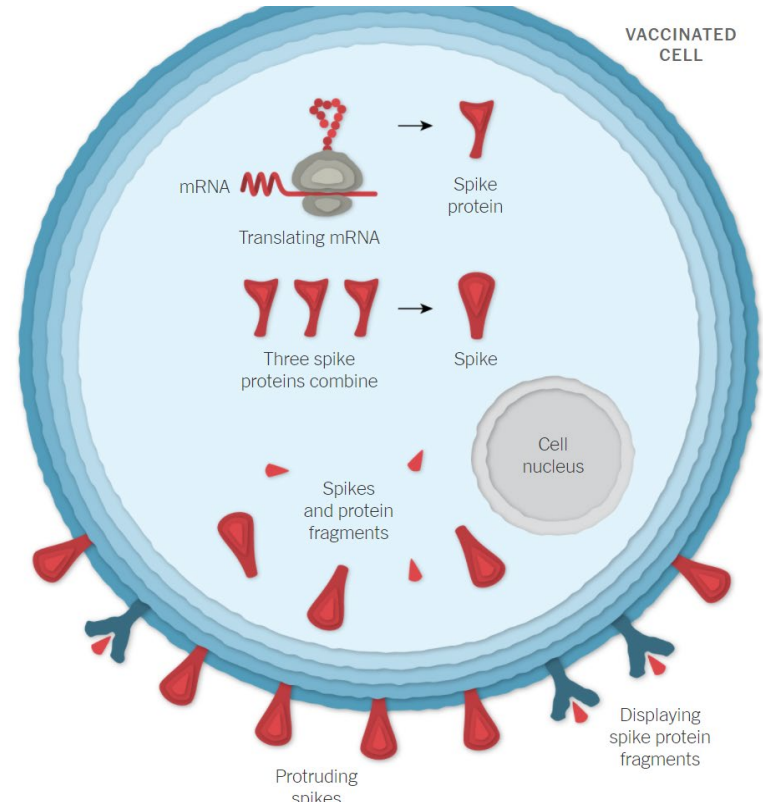
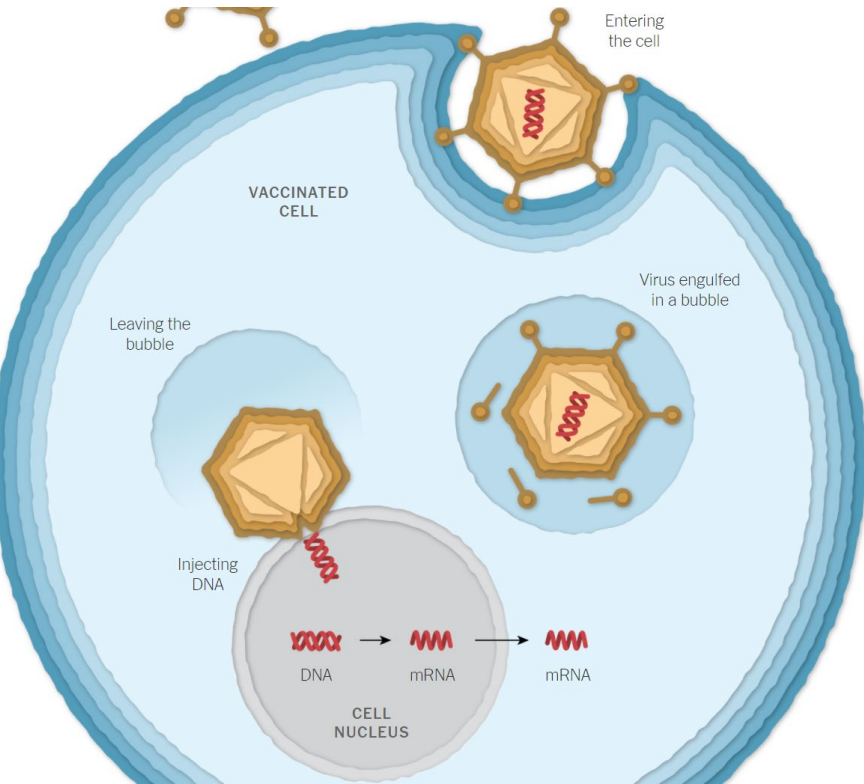
● Susceptible ● Infected ● Immune —→ Disease transmission

Source: GAO adaptation of NIH graphic. | GAO-20-646SP

Core Four




Johnson & Johnson DNA/Adenovirus Vaccine



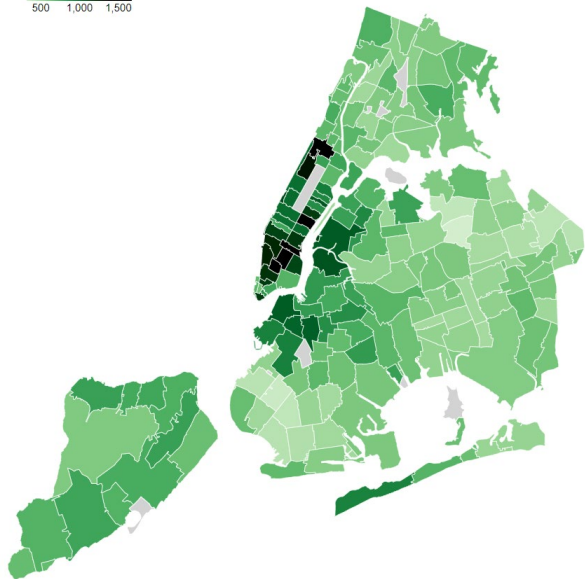
Daily Test Rates

Daily test rate (per 100,000 people)




500 1,000 1,500

A horizontal color scale legend for daily test rates. It shows a gradient from light green on the left to dark green on the right. Numerical markers are placed at 500, 1,000, and 1,500.



Percent Positive Tests

7-day percent positive



0 5 10

A horizontal color scale legend for the 7-day percent positive. It shows a gradient from light orange on the left to dark red on the right. Numerical markers are placed at 0, 5, and 10.

