

Connecticut Vaccination Summary

Ridgefield COVID-19 Task Force



Data downloaded from
<https://covid.cdc.gov/covid-data-tracker/#vaccinations>

Tuesday, February 23, 2021

Connecticut Vaccination Summary

Tuesday, February 23, 2021

Connecticut ranks #6 among states in percent of population receiving at least one dose.

- 1 Connecticut ranks **#6** in administered doses as percent of population.
- 2 Connecticut ranks **#9** in delivered doses as percent of population.
- 3 Connecticut ranks **#7** in administered doses as percent of delivered doses.

$$\begin{array}{ccccc} \text{1} & & \text{2} & & \text{3} \\ \text{Shots Administered} & = & \text{Doses Received} & \times & \text{Administration Efficiency} \\ \left[\frac{\text{Administered Doses}}{\text{Population}} \right] & = & \left[\frac{\text{Delivered Doses}}{\text{Population}} \right] & \times & \left[\frac{\text{Administered Doses}}{\text{Delivered Doses}} \right] \\ \text{Driven By ----->} & & \text{Federal Government} & & \text{Local Governments} \end{array}$$



Connecticut and US Vaccination Summary

Connecticut (as of Tuesday February 23, 2021)	Cumulative	Daily
Doses Delivered	1,025,755	15,954
Doses Administered	892,882	25,963
Percent of Population Who Have Received First Dose Only	9.31%	
Percent of Population Who Have Received Second Dose	7.87%	
Percent of Population Who Have Received At Least One Dose	17.18%	
Connecticut Rank Among 50 States and DC	6	

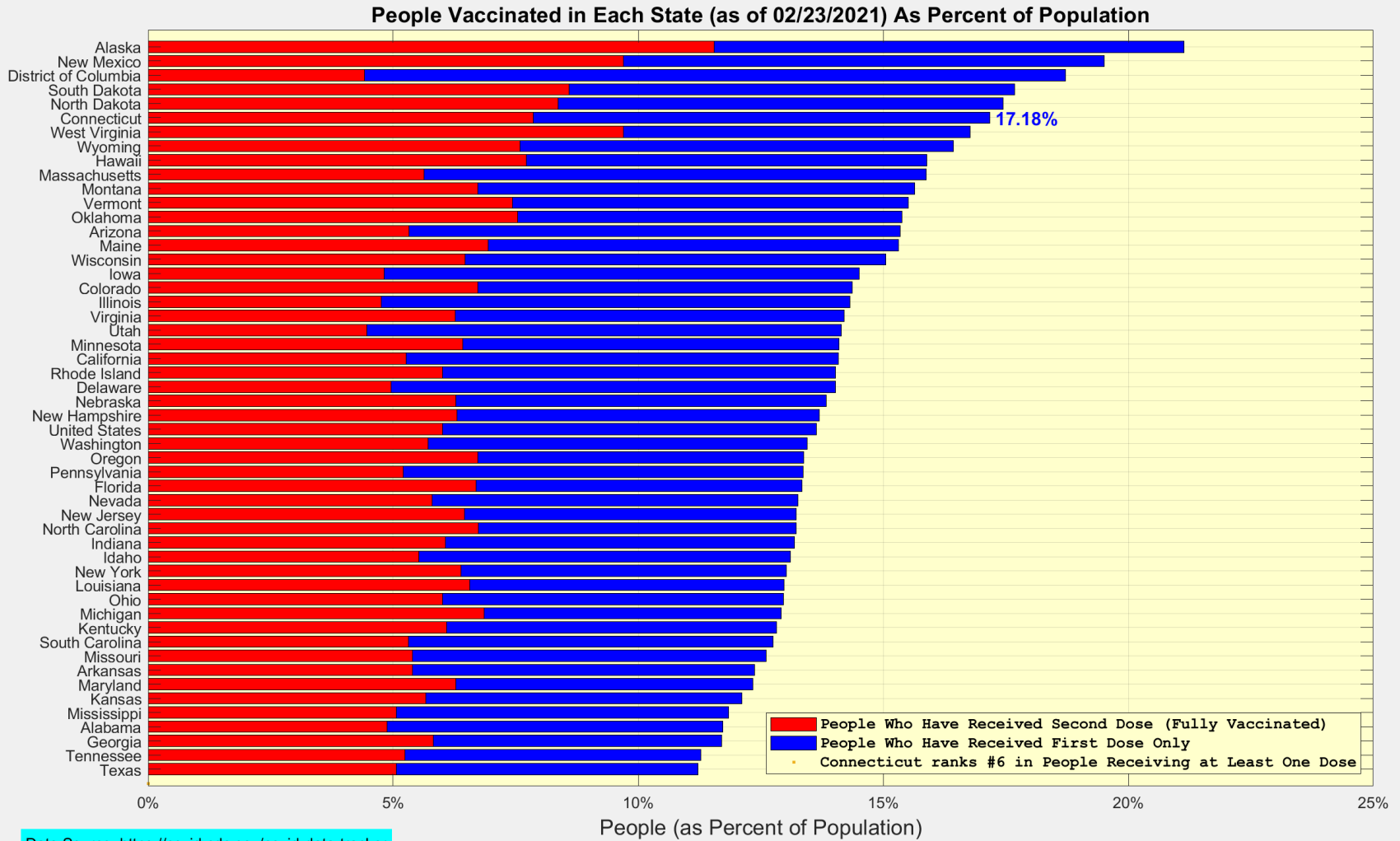
United States (as of Tuesday February 23, 2021)	Cumulative	Daily
Doses Delivered	82,114,370	1,493,771
Doses Administered	65,032,083	1,401,674
Percent of Population Who Have Received First Dose Only	7.63%	
Percent of Population Who Have Received Second Dose	6.01%	
Percent of Population Who Have Received At Least One Dose	13.64%	

Data Source: <https://covid.cdc.gov/covid-data-tracker/#vaccinations>.

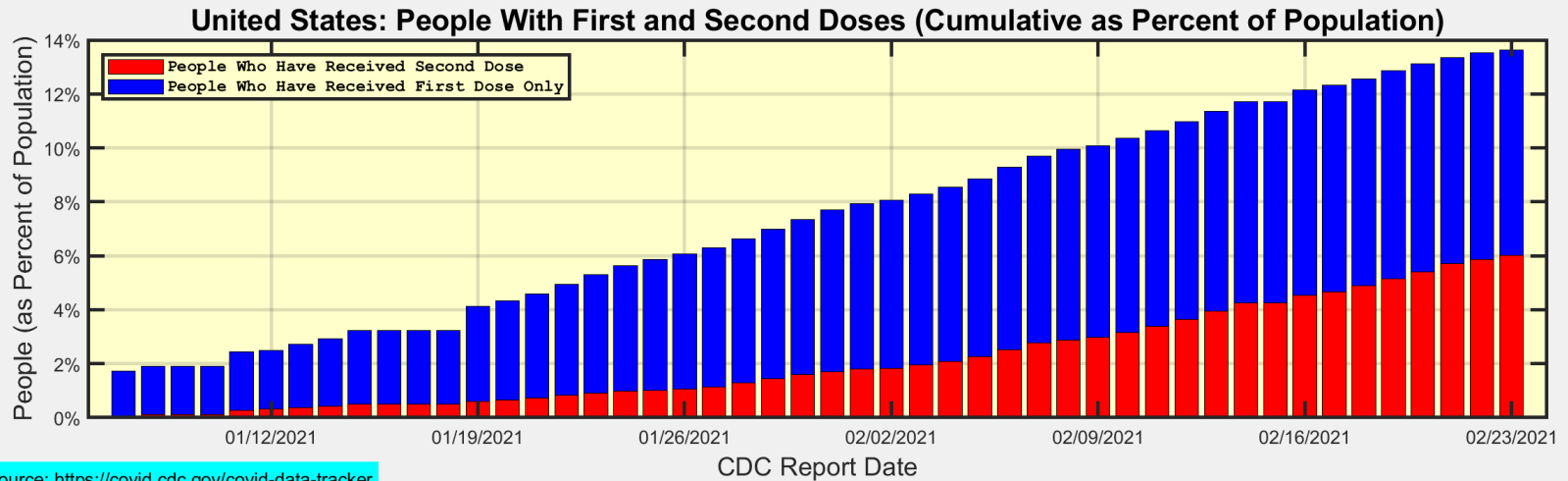
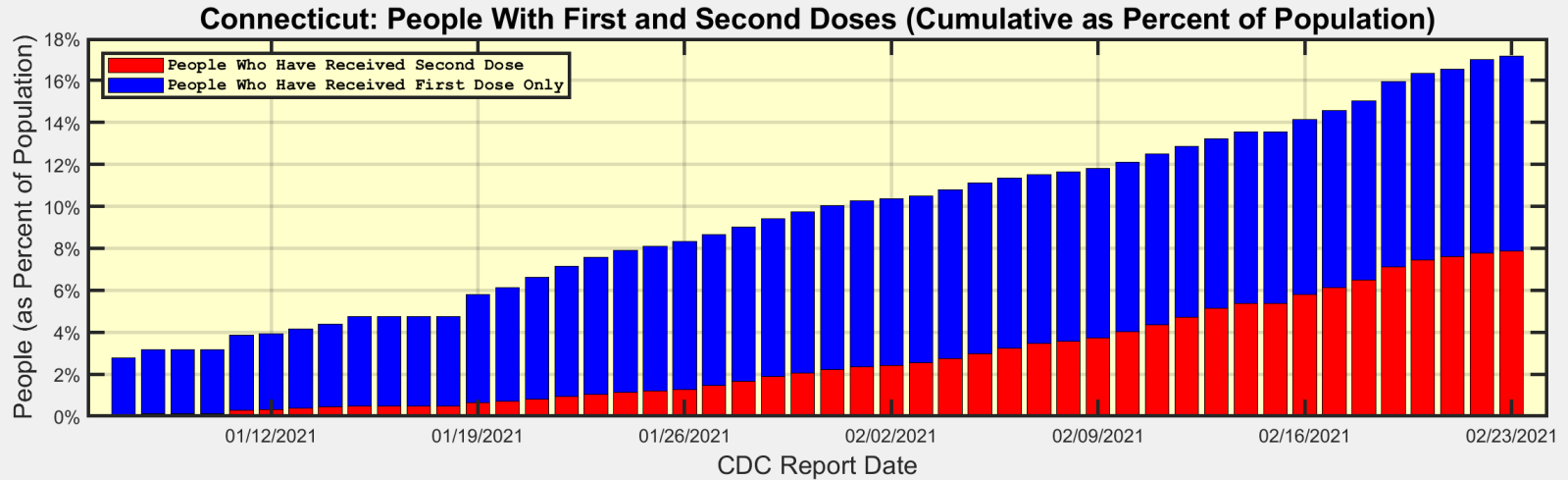
The Daily numbers are the most recent 7-day moving averages.



People Vaccinated in Each State as Percent of Population



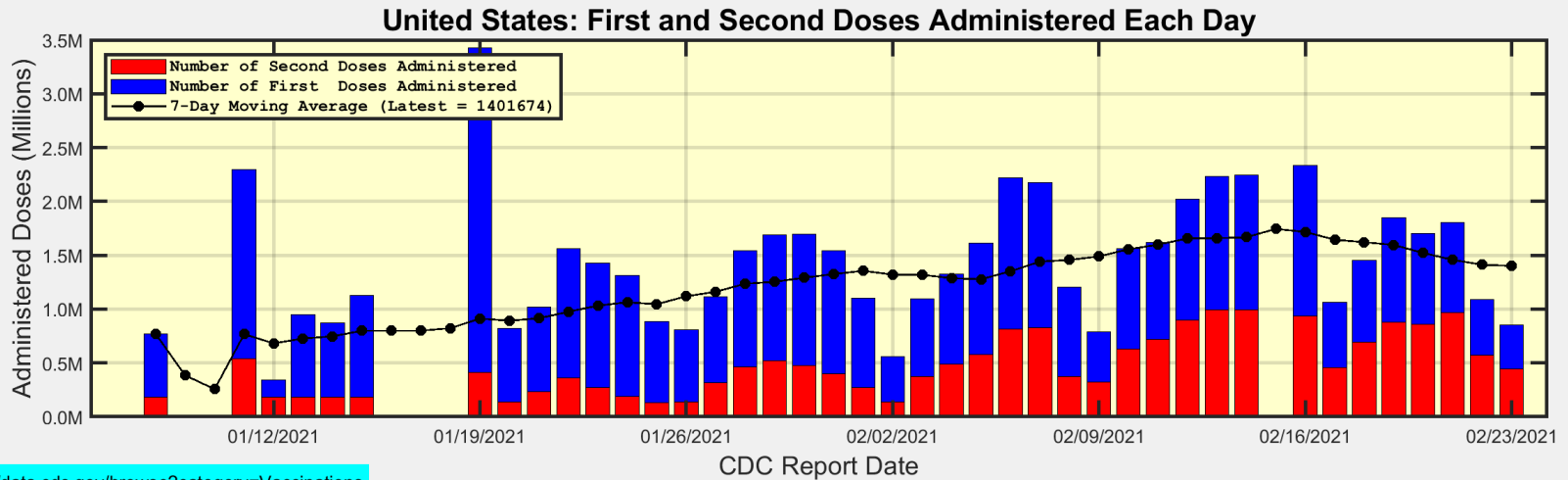
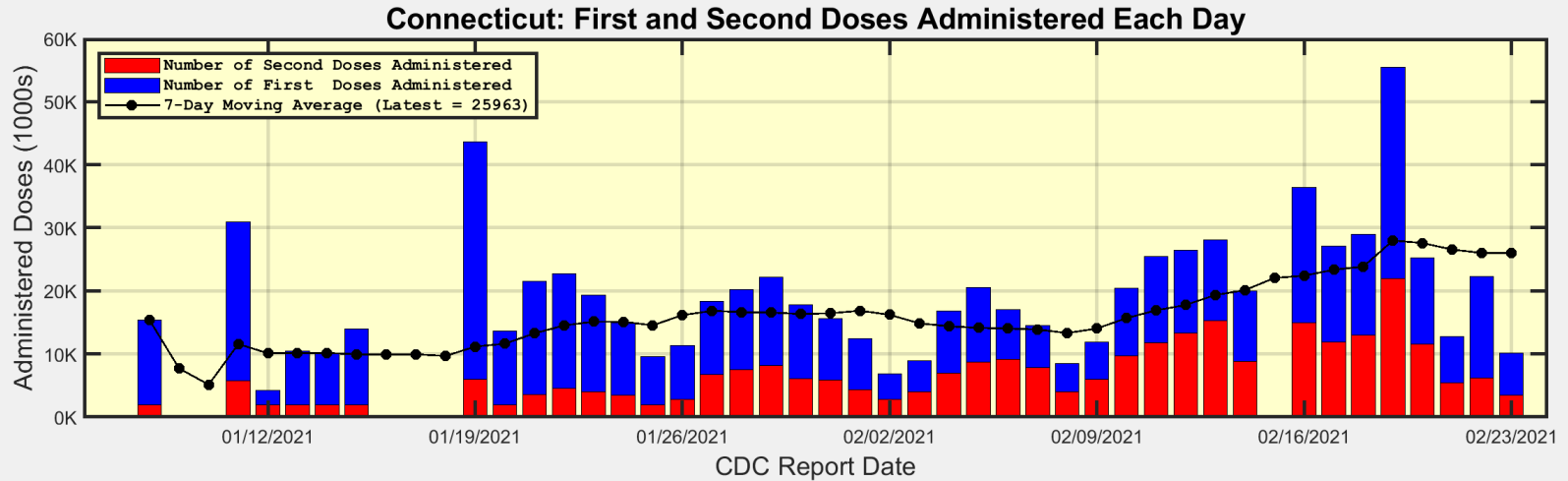
People who have received First and Second Doses (Cumulative)



Data Source: <https://covid.cdc.gov/covid-data-tracker>



First and Second Doses Administered Each Day



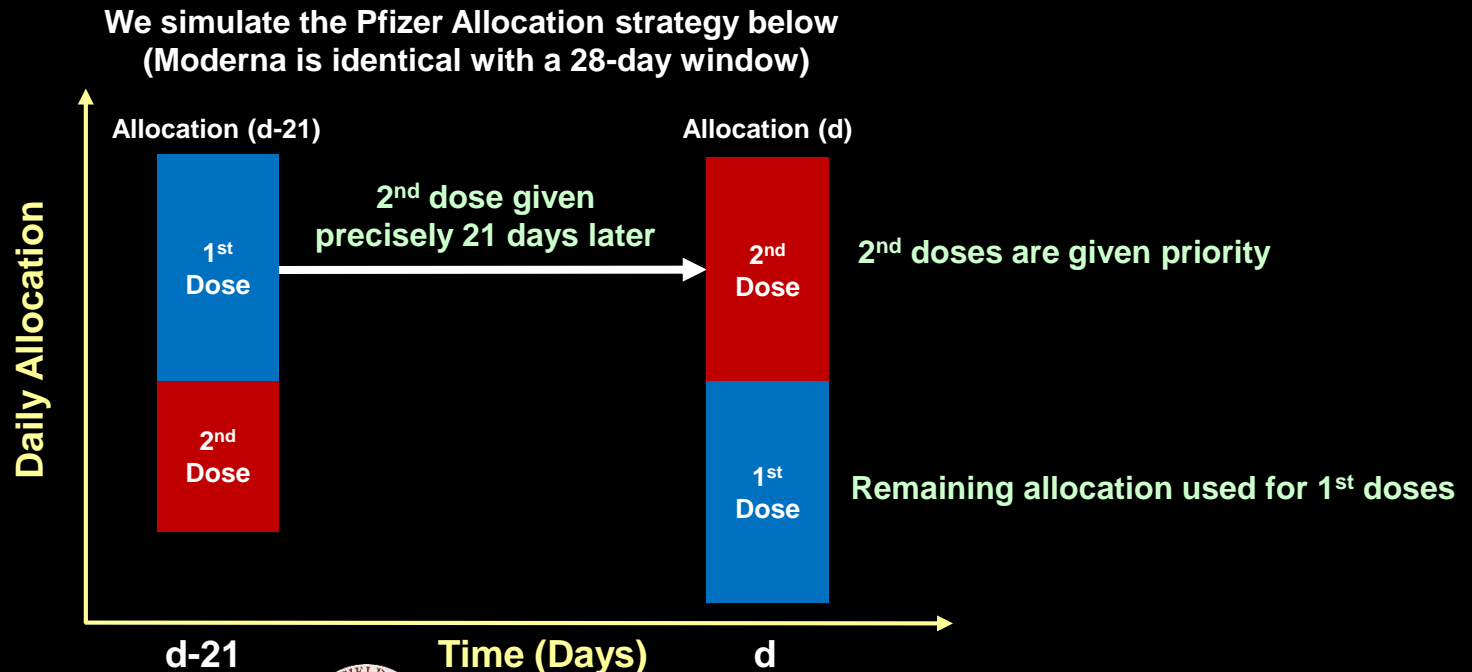
<https://data.cdc.gov/browse?category=Vaccinations>



Ridgefield COVID-19 Task Force

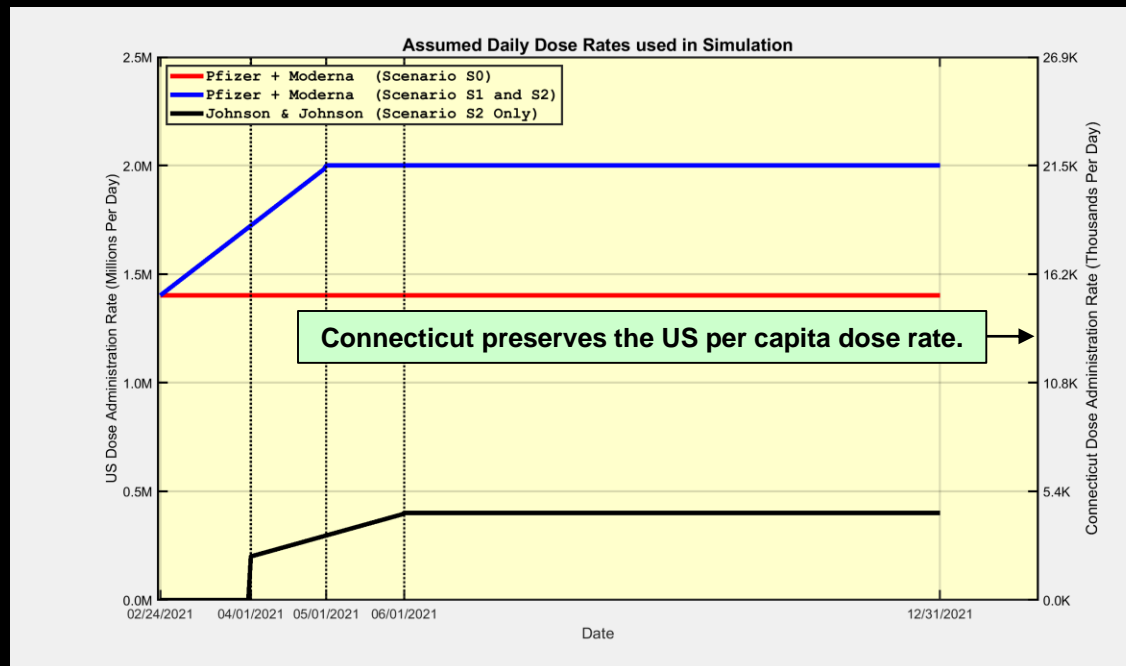
Simulation of the Connecticut Vaccine Rollout: Assumptions

1. Herd Immunity is achieved when 75% of the total population is fully vaccinated.
2. We replicate known history (Slide 6) up to the first day of the simulation.
3. We assume that all people who have previously tested positive for COVID-19 are vaccinated.
4. The administered doses are split evenly between Pfizer and Moderna.
5. All residents eligible for their 2nd dose (21 or 28 days after 1st dose) will *receive it on the required day*.
6. Doses remaining after administering *all required 2nd doses are administered as 1st doses*.
7. Hence, we assume sufficient capacity to *administer all allocated doses without any delay or disposal*.
8. The Johnson & Johnson vaccine becomes available on April 1 *with only one dose required*.



We consider three simulation scenarios here

- Scenario S0: The US maintains the current daily rate of Pfizer and Moderna Vaccinations
 - The current US 7-day moving average is 1.72M doses per day (bottom panel on Slide 2)
- Scenario S1: The US increases Pfizer + Moderna Vaccines to 2M per day
 - There is a linear ramp-up from today to May 1 (2M doses per day)
- Scenario S2: The Johnson & Johnson Vaccine becomes widely available on April 1
 - There is a linear ramp-up from April 1 (200K doses per day) to June 1 (400K doses per day)



When might Connecticut Reach Herd Immunity (Scenario 2)?

