



THE WHITE HOUSE  
WASHINGTON

# COVID-19 Press Briefing

March 31, 2021



# Daily Change in COVID-19 Cases, US

January 22, 2020 – March 29, 2021

TOTAL Cases Reported Since 1/22/20

30,147,895

NEW Cases Reported to CDC on 3/29/21

60,699

Change in 7-Day Case Average

+11.9%

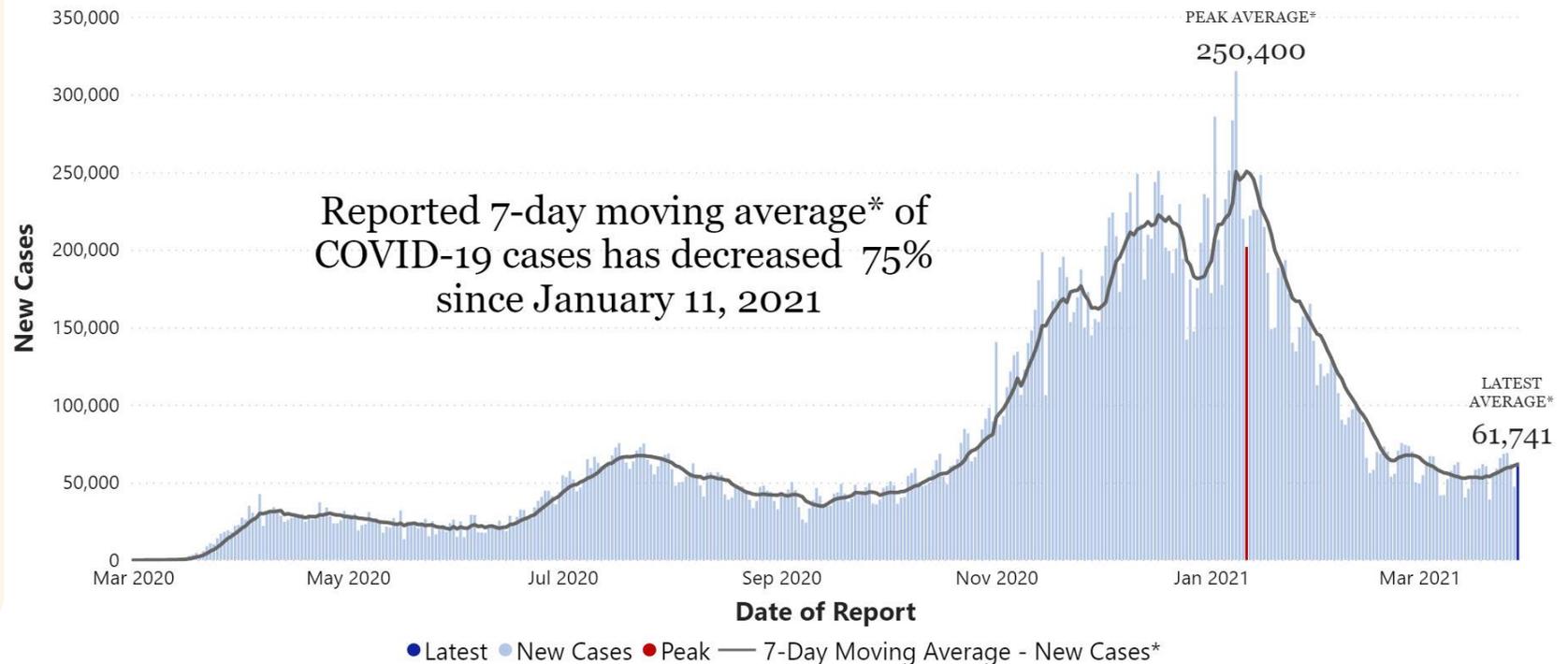
Current 7-Day Case Average (3/23/21 - 3/29/21)

61,741

Prior 7-Day Case Average (3/16/21 - 3/22/21)

55,153

Peaks in New Cases and Highest 7-Day Moving Average		
	Highest Daily Number of New Cases	Highest 7-Day Moving Average
<b>Current</b>	315,119 (1/8/21)	250,400 (1/11/21)
<b>2<sup>nd</sup> Peak</b>	75,319 (7/17/20)	67,337 (7/23/20)
<b>1<sup>st</sup> Peak</b>	42,568 (4/6/20)	31,915 (4/12/20)



\*7-day averages exclude historical cases reported retroactively by states



# New Admissions of Patients with Confirmed COVID-19

August 1, 2020 – March 28, 2021

Patients Currently Hospitalized with COVID on 3/28/21

**32,973**

New Admissions on 3/28/21

**4,552**

Peak in New Admissions (1/5/21)

**17,993**

Change in 7-Day Average of New Admissions

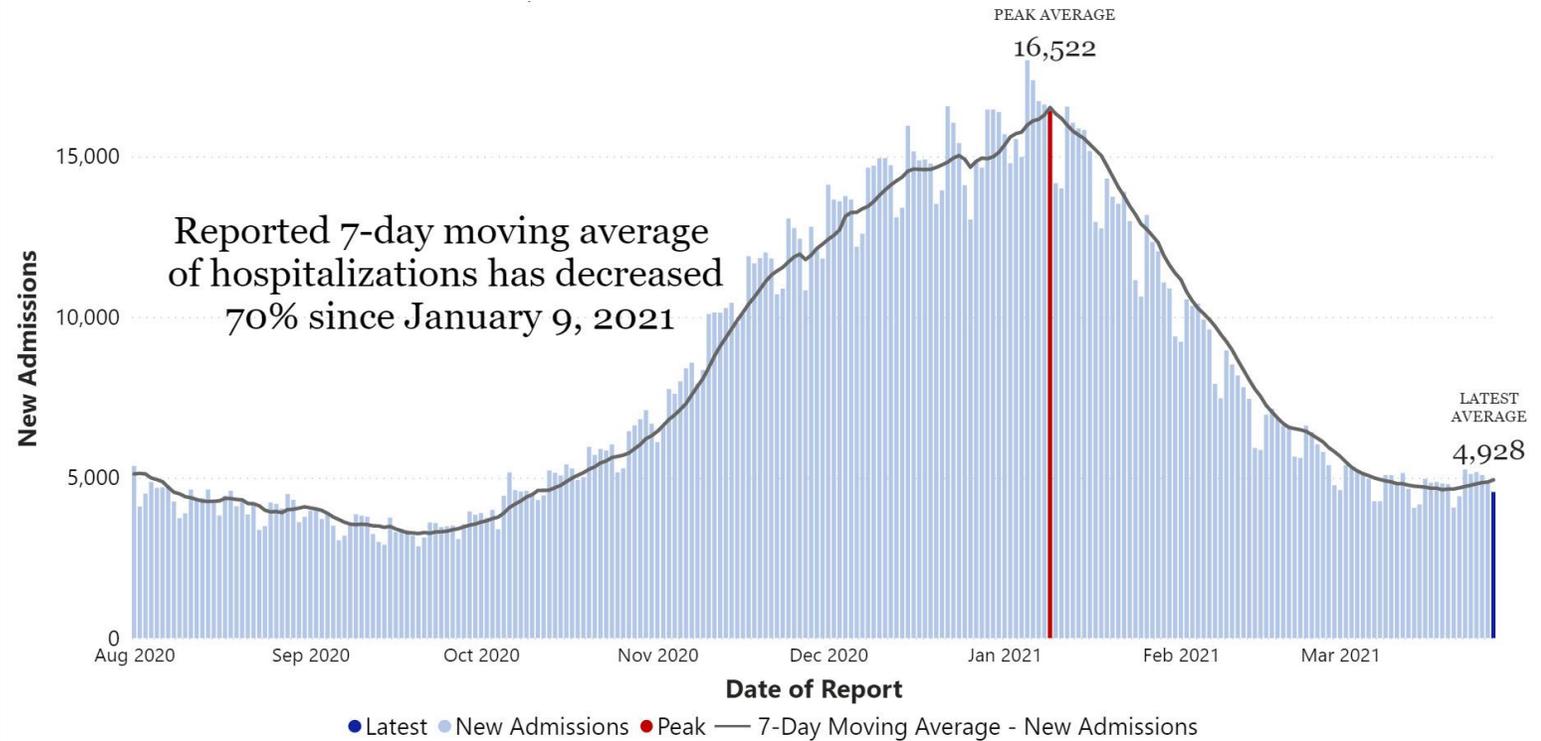
**+6.1%**

Current 7-Day Average of New Admissions (3/22/21 - 3/28/21)

**4,928**

Prior 7-Day Average of New Admissions (3/15/21 - 3/21/21)

**4,644**



# Daily Change in COVID-19 Deaths, United States

January 22, 2020 – March 29, 2021

TOTAL Deaths Reported Since 1/22/2020

547,296

NEW Deaths Reported to CDC on 3/29/21

592

Change in 7-Day Death Average

-3.0%

Current 7-Day Death Average (3/23/21 - 3/29/21)

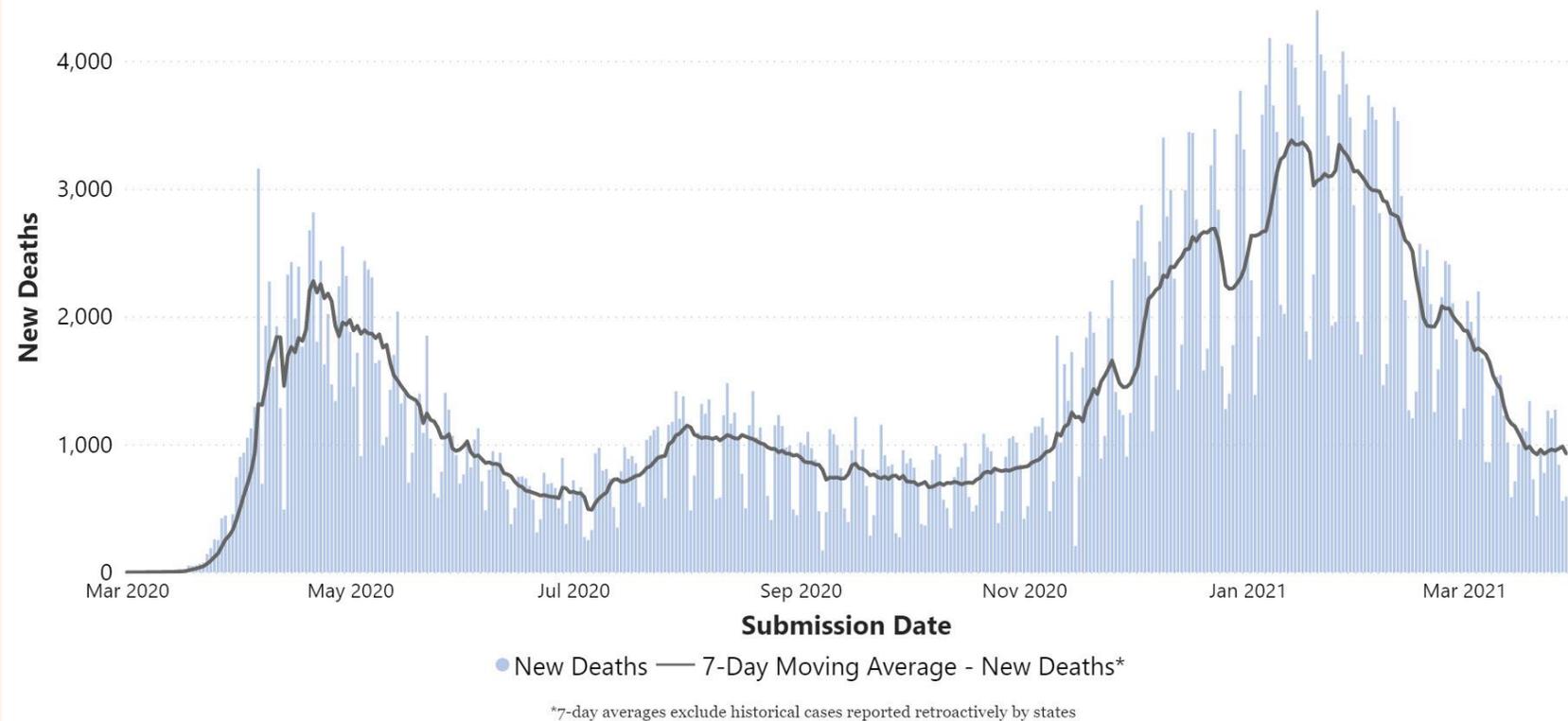
931

Prior 7-Day Death Average (3/16/21 - 3/22/21)

960

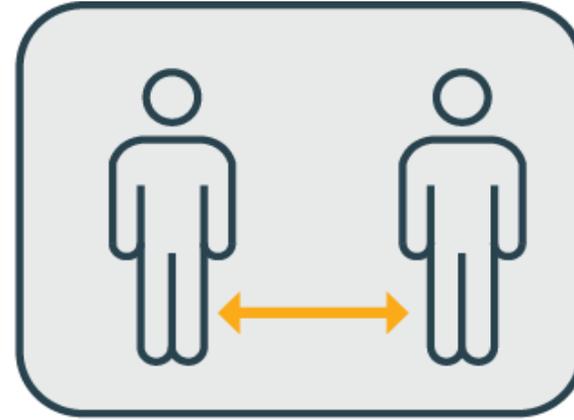
Forecasted Total Deaths by 4/17/21

558,000 to 578,000

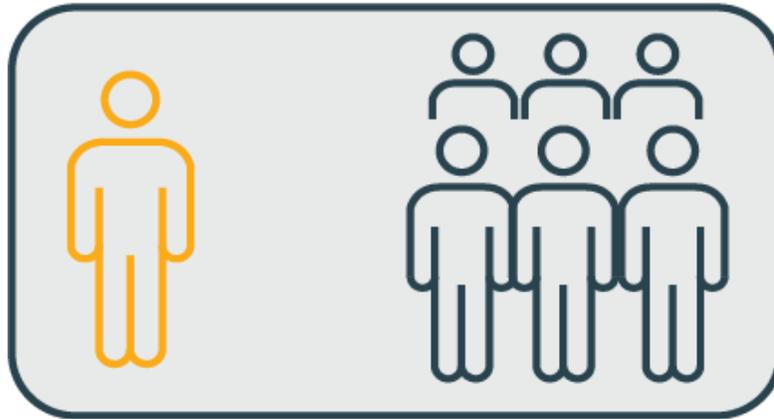




**WEAR A MASK**



**STAY 6 FEET APART**

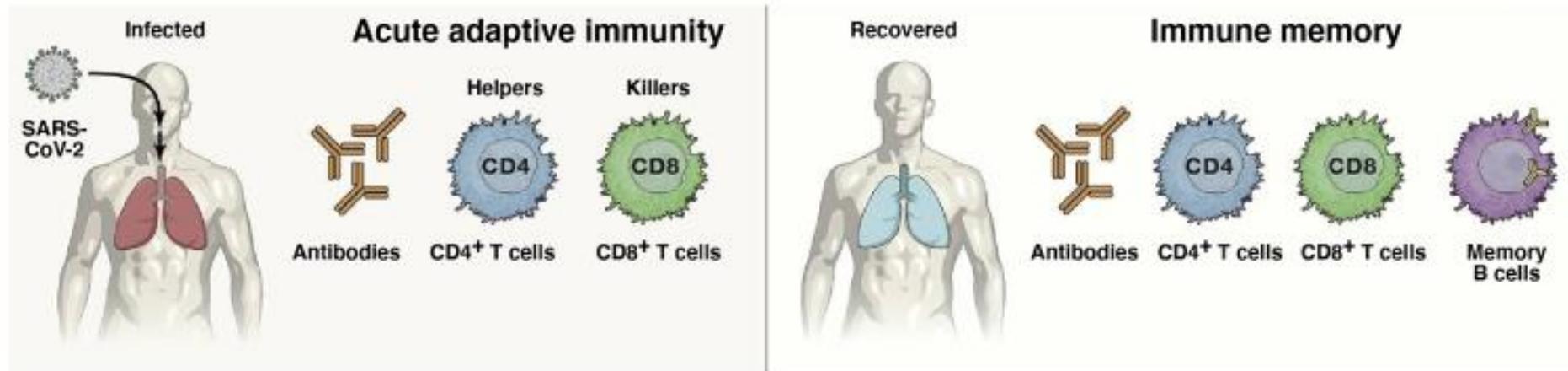


**AVOID CROWDS**



**AVOID TRAVEL**

# Immune Responses to SARS-CoV-2 and Other Viruses



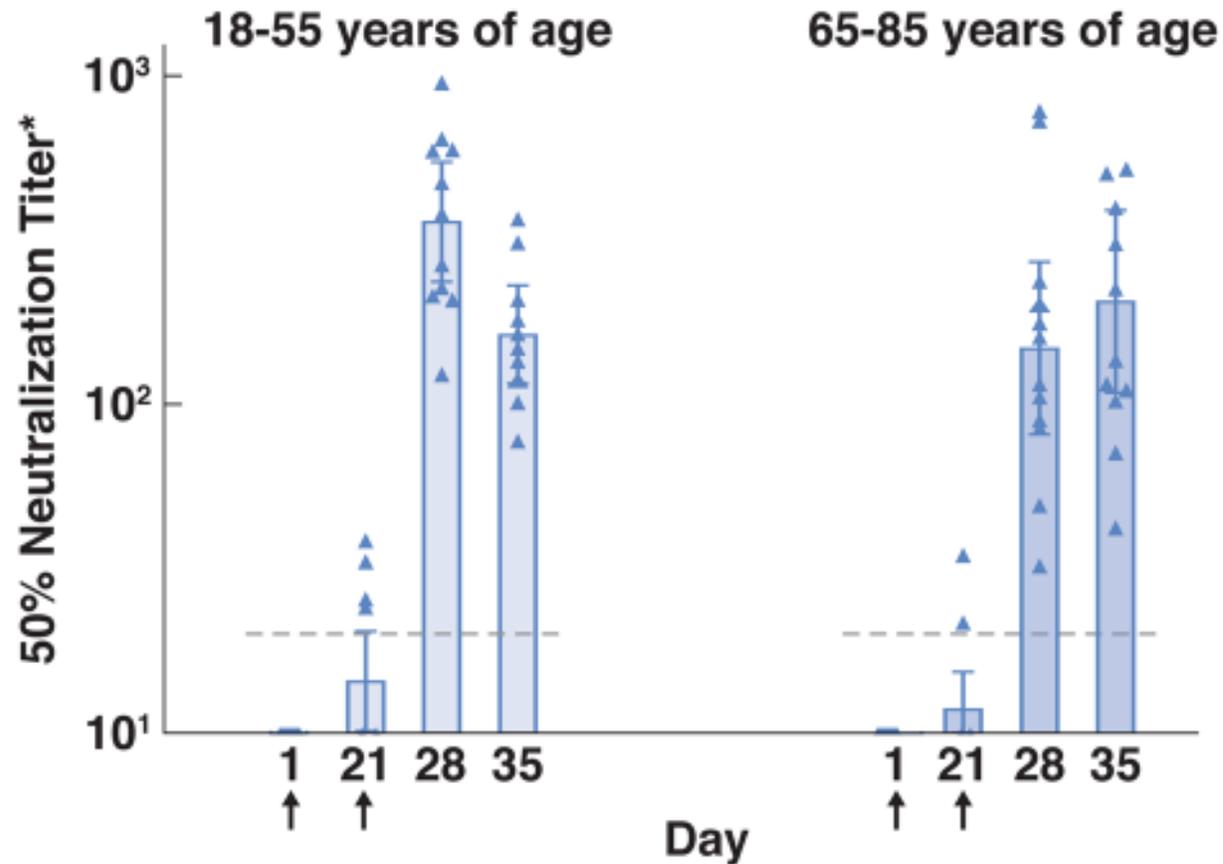
Source: A Sette & S Crotty. *Cell*, 2/18/2021.

# **Immune Protection Against COVID-19 Variants When Vaccinated Against Wild-Type Viral Strain**

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- **High titer of antibody specific against “wild-type” strain with spillover effect against variants**
- **T-cell responses specific against wild-type strain with cross-reactivity against a range of variants**

# Pfizer/Biontech COVID-19 Vaccine: Neutralizing Antibody Titers After First and Second Dose



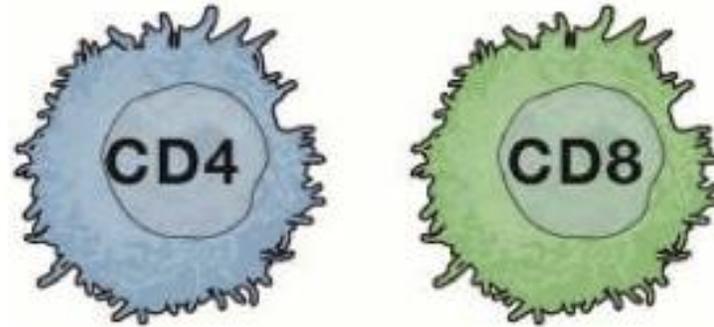
\*50% SARS-CoV-2-neutralizing geometric mean titers at 30  $\mu$ g dose

Source: EW Walsh et al. *NEJM* 383:2439, 2020.

# T Cells Work Against Multiple Parts of SARS-CoV-2, Including Those That Are Conserved Across Viral Variants

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## Immune memory



CD4<sup>+</sup> T cells

CD8<sup>+</sup> T cells

Source: A Sette & S Crotty. *Cell*, 2/18/2021.

# Multiple Immune Memory Responses to SARS-CoV-2 Infection Persist for Months



## Immunological Memory to SARS-CoV-2 Assessed for Up to 8 Months After Infection

JM Dan, S Crotty et al.

- Substantial immune memory generated after COVID-19 infection involving all four major types of immune memory (B cells, antibodies, CD4+ T cells, CD8+ T cells)
- About 95% of subjects retained immune memory at ~6 months after infection

# T-Cell Memory Responses Against Variants Seen After Vaccination as Well as After Infection



Cold  
Spring  
Harbor  
Laboratory

bioRxiv

THE PREPRINT SERVER FOR BIOLOGY

March 1, 2021

## Negligible Impact of SARS-CoV-2 Variants on CD4<sup>+</sup> and CD8<sup>+</sup> T Cell Reactivity in COVID-19 Exposed Donors and Vaccinees

A Tarke, A Sette et al.

- CD4<sup>+</sup> and CD8<sup>+</sup> T cell responses in **convalescent COVID-19 subjects** or **COVID-19 mRNA vaccinees** are not substantially affected by mutations found in the SARS-CoV-2 variants B.1.1.7, B.1.351, P.1, and B.1.427/B.1.429



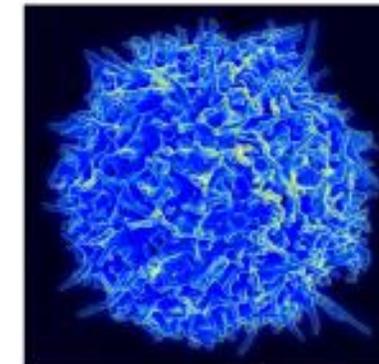
NIH

News Release

# T Cells Recognize Recent SARS-CoV-2 Variants

*NIAID research suggests protective effects of  
vaccination remain intact*

- SARS-CoV-2-specific CD8<sup>+</sup> T-cell responses from people recovered from COVID-19 recognized virtually all mutations in the variants studied: B.1.1.7, B.1.351, and P.1.



Human T cell

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