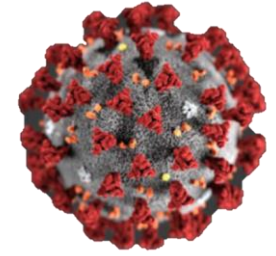


# New Hampshire Coronavirus Disease 2019 Weekly Call for Healthcare Providers and Public Health Partners



March 25, 2021

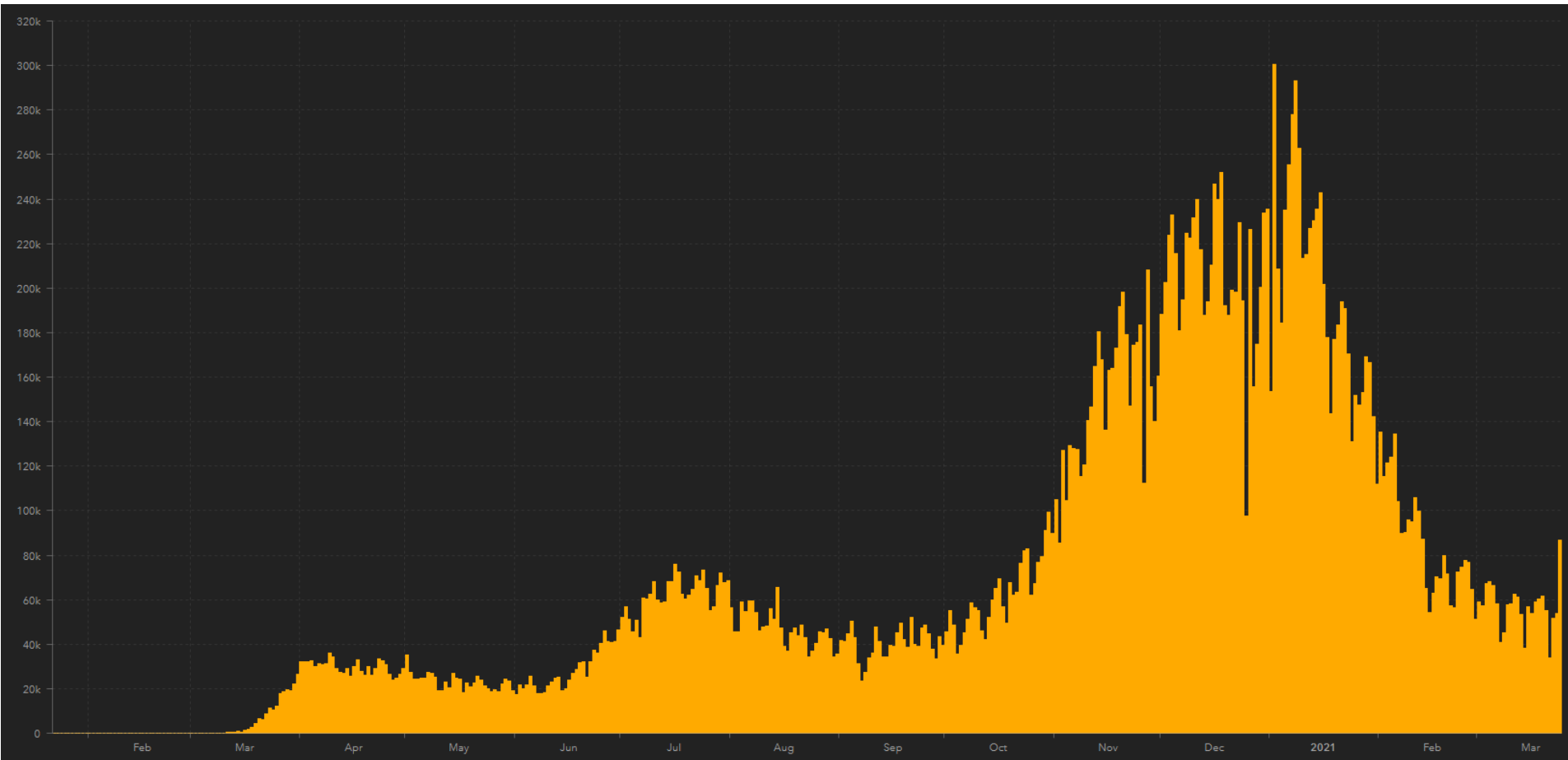
*Ben Chan  
Elizabeth Talbot  
Beth Daly  
Lindsay Pierce*

Thursday noon-time partner calls will focus on science, medical, and vaccine updates geared towards our healthcare partners

# Agenda

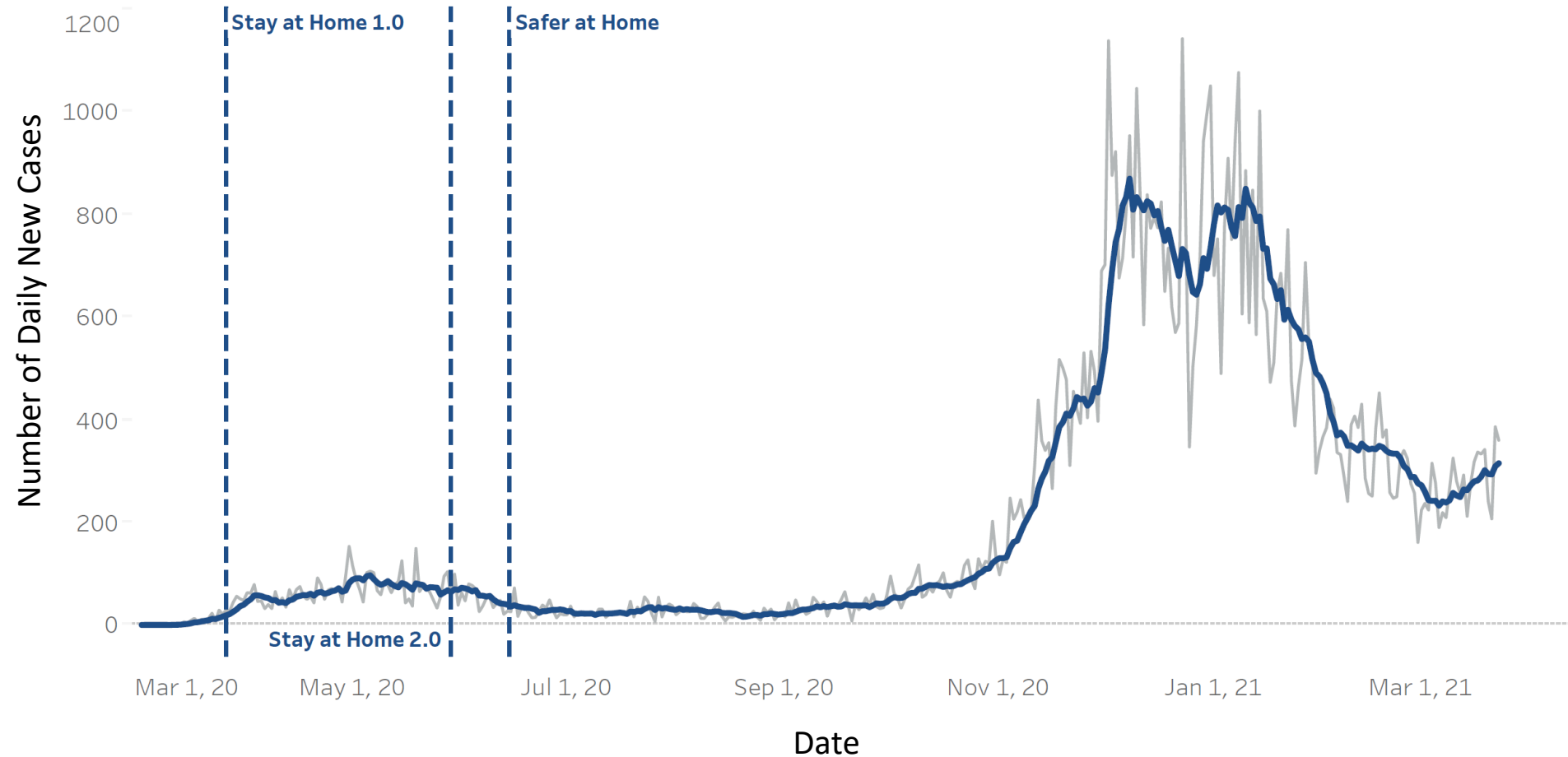
- Epidemiology Update
- AstraZeneca Vaccine Update
- Questions & Answers (Q&A)

# National Daily Incidence of COVID-19



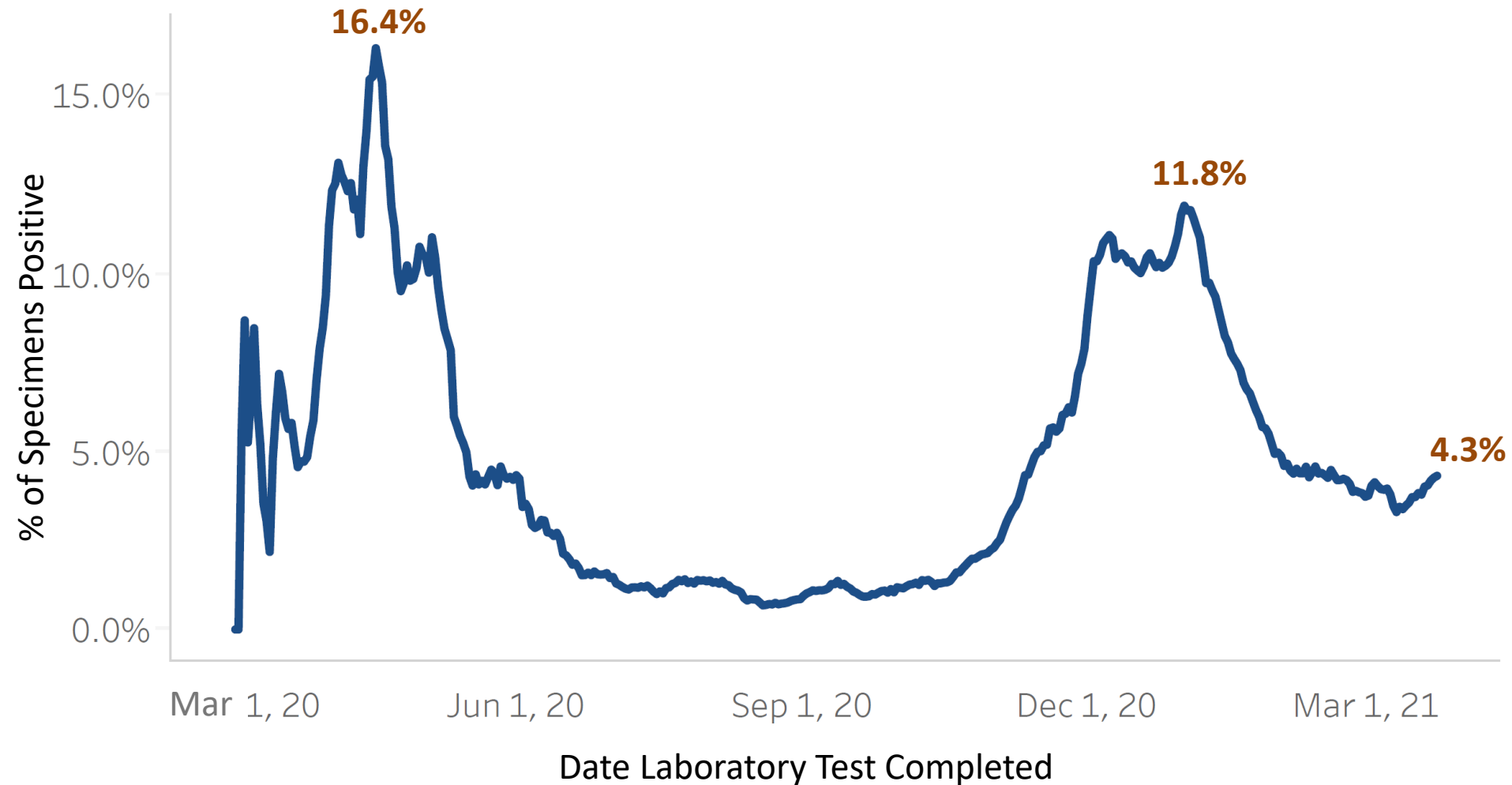
- More than 30.0 million cumulative cases in the U.S. (24% of all global infections)
- More than 545,000 deaths in the U.S. from COVID-19 (20% of all global deaths)

# Number of New COVID-19 Cases per Day in NH



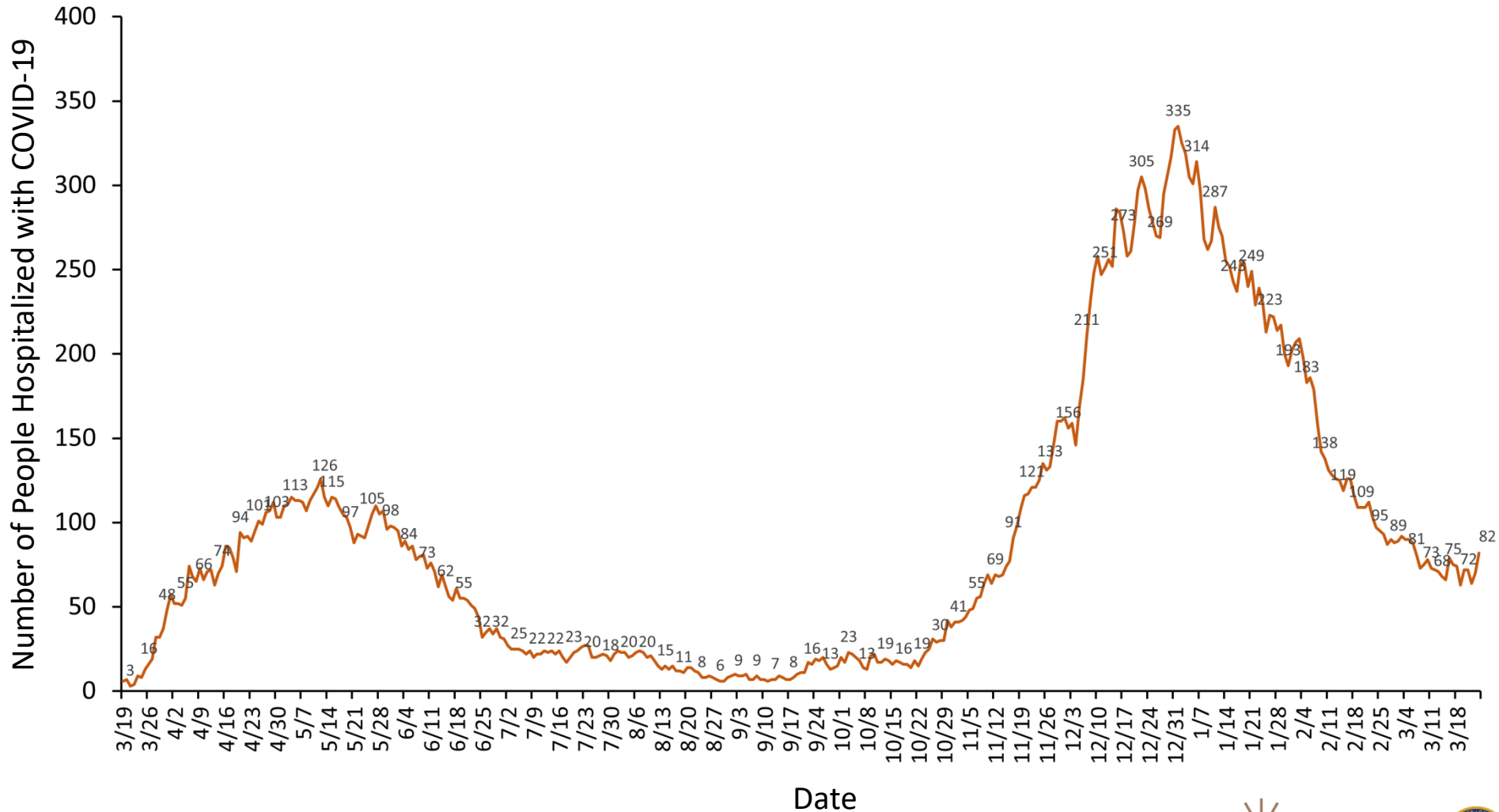
<https://www.nh.gov/covid19/dashboard/overview.htm#dash>

# % of Tests (Antigen and PCR) Positive for COVID-19 (7-Day Average)



<https://www.nh.gov/covid19/dashboard/overview.htm#dash>

# Number of People Hospitalized with COVID-19 Each Day in NH (Hospital Census)



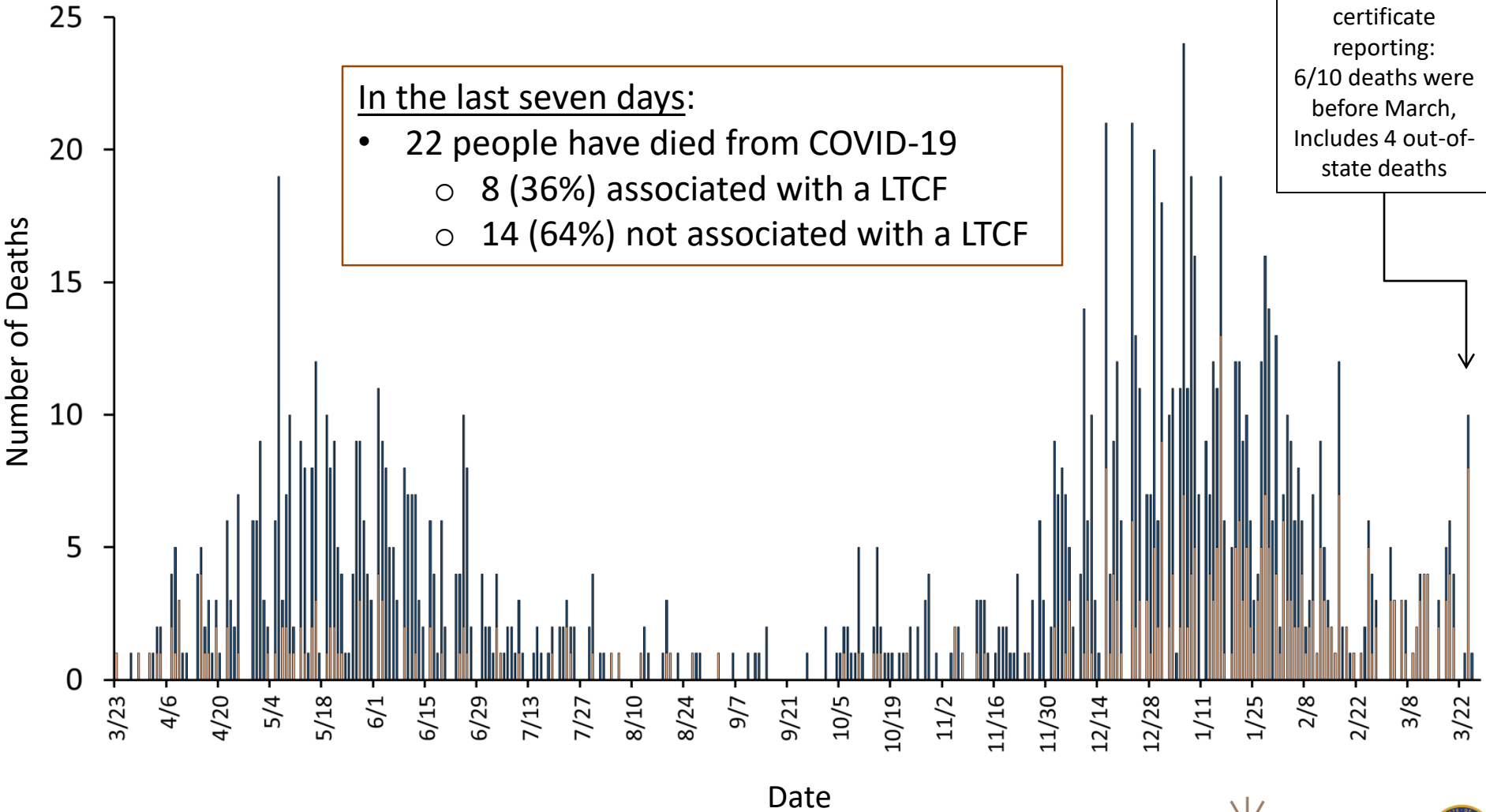
# Number of COVID-19 Deaths in NH by Report Date

■ Non-LTCF Associated   ■ LTCF Associated

In the last seven days:

- 22 people have died from COVID-19
  - 8 (36%) associated with a LTCF
  - 14 (64%) not associated with a LTCF

Delayed death certificate reporting:  
6/10 deaths were before March, Includes 4 out-of-state deaths

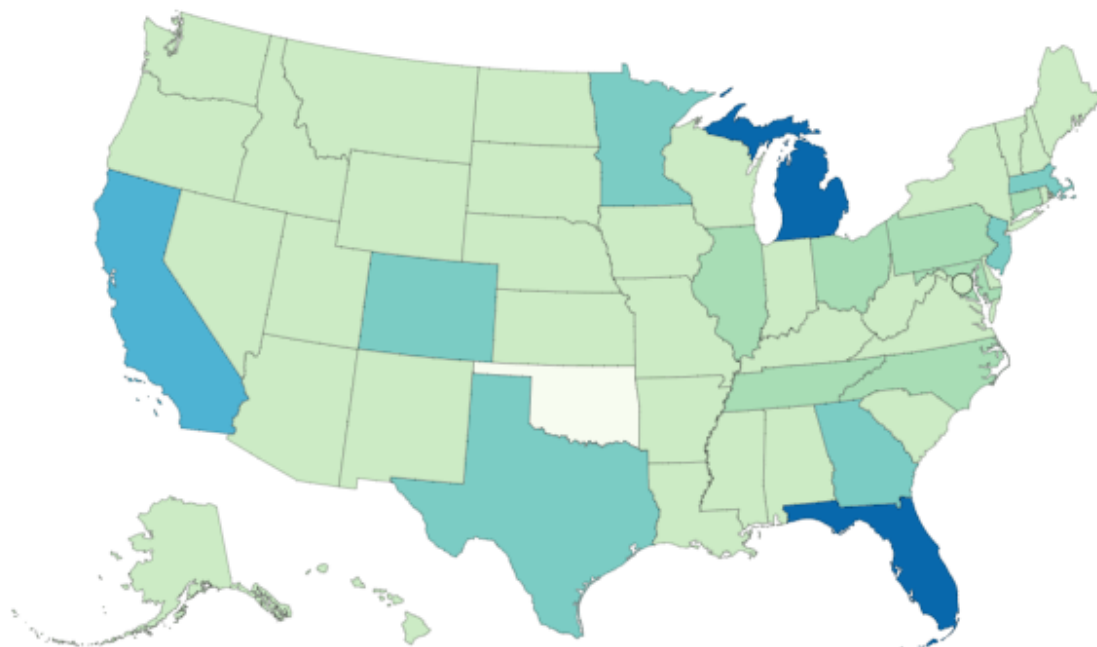


# Variants of Concern (Current as of 3/23/21)

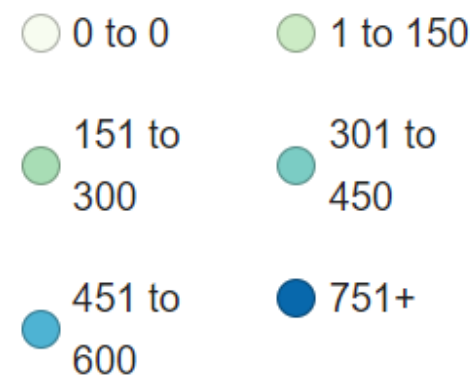
Variant	Reported Cases in US	Number of Jurisdictions Reporting
B.1.1.7	7501	51
B.1.351	219	27
P.1	61	18



# Variant B.1.1.7



## Number of Cases



## Filters

Variant B.1.1.7

Territories

AS

GU

MH

FM

MP

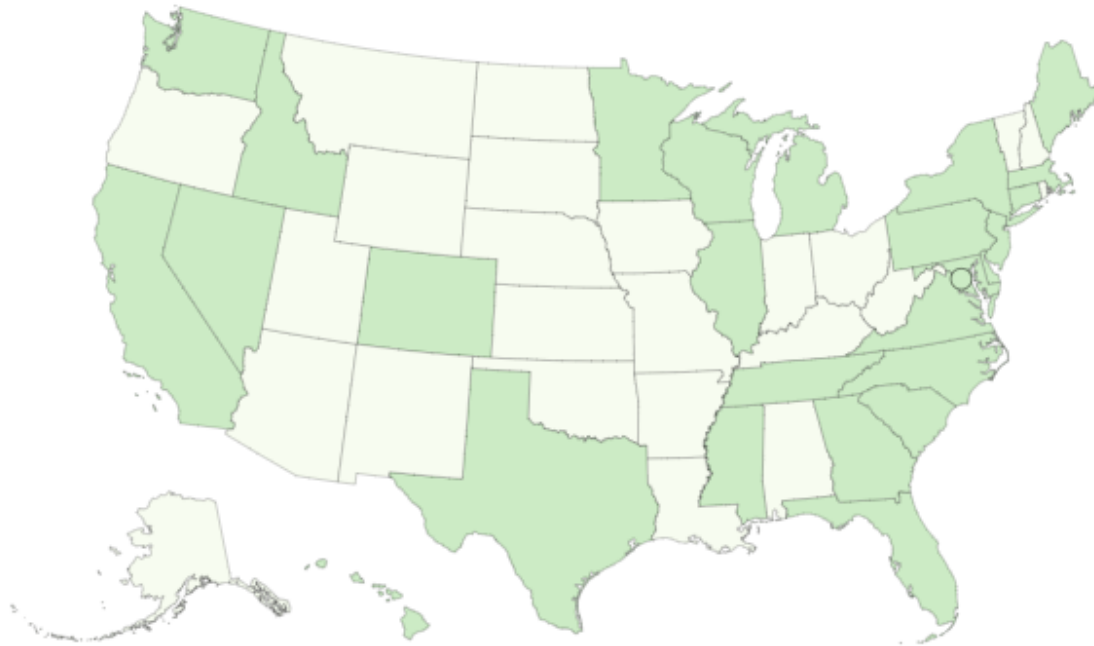
PW

PR

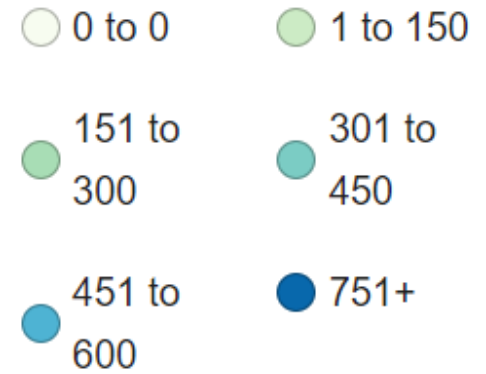
VI



# Variant B.1.351



## Number of Cases



## Filters

Variant B.1.351 ▾

Territories

AS

GU

MH

FM

MP

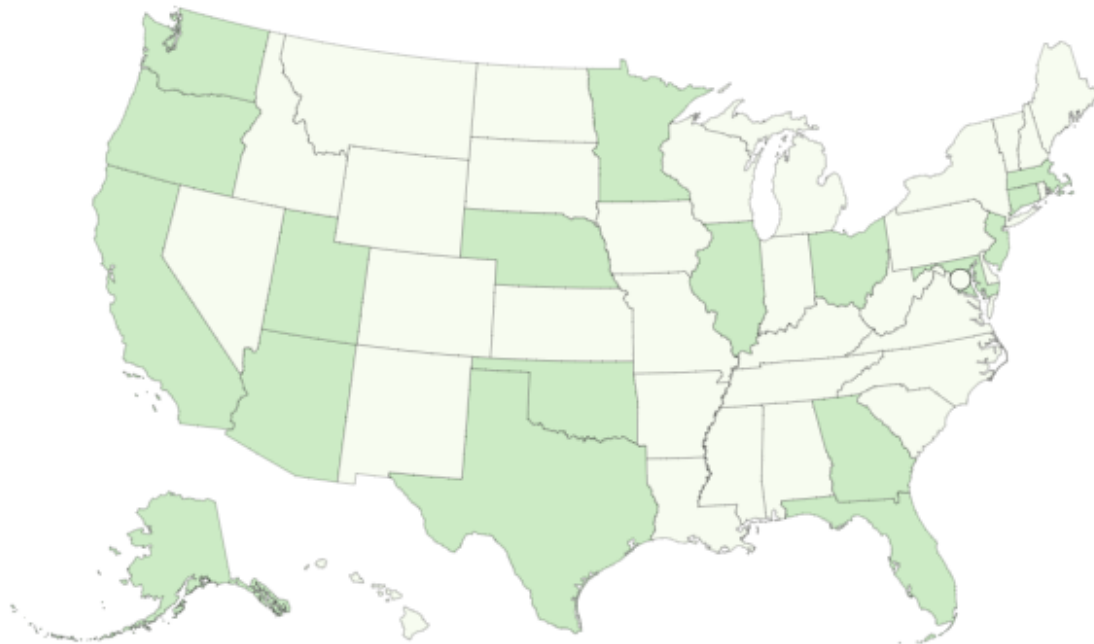
PW

PR

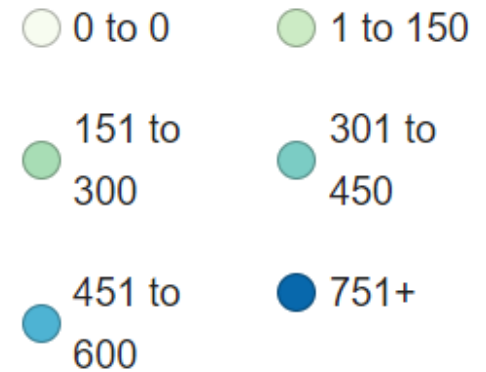
VI



# Variant P.1



## Number of Cases



## Filters

Variant P.1

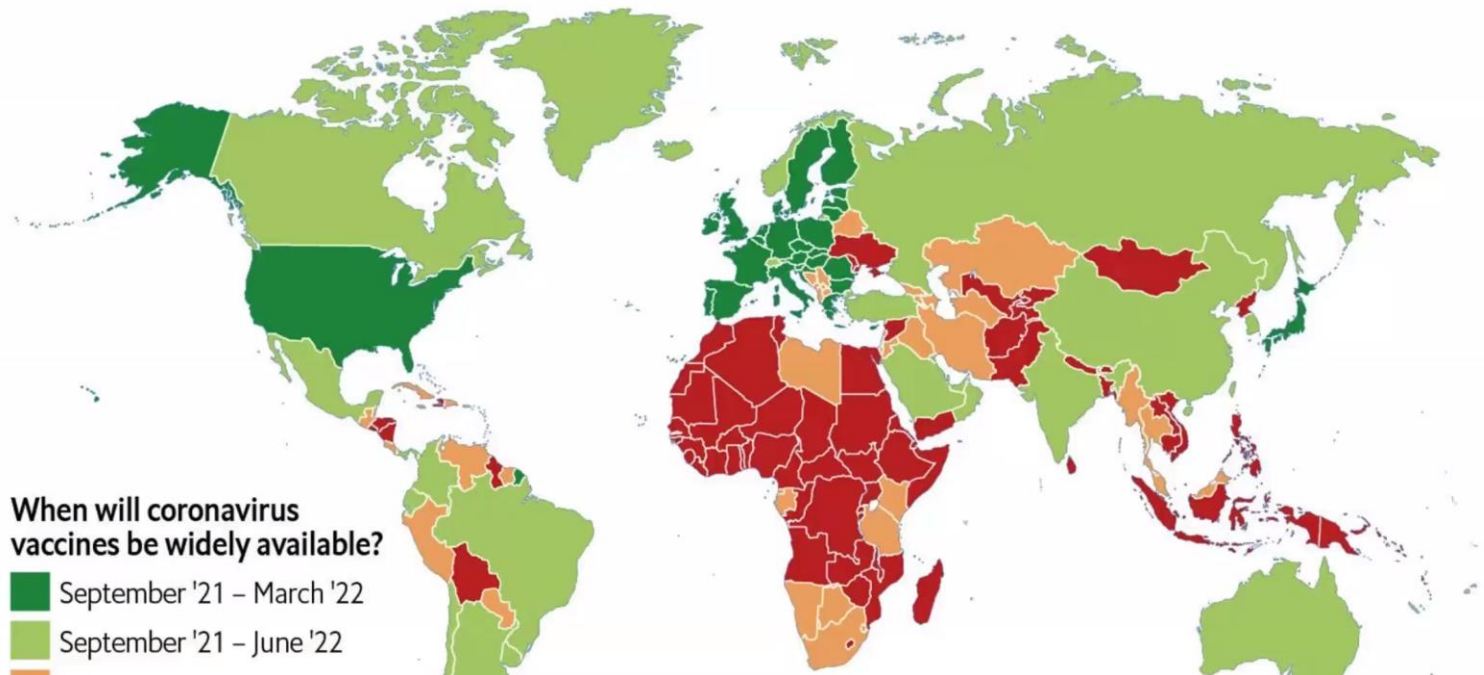
Territories **AS** **GU** **MH** **FM** **MP** **PW** **PR** **VI**



# Global Hopes on the AZ Vaccine

- Advantages: can quickly produce, cheap at few dollars/dose and easy to store longterm at refrigerator temps
- Expected dominant worldwide for LMICs
- Manufacturing capacity 3B doses in 2021

**Rich countries will get access to coronavirus vaccines earlier than others**



# AZ/Oxford nonUS Phase 3

## Lancet 12/9/2020

- 11,636 adults in UK and Brazil vaccinated with 2 doses or control using meningococcal conjugate vaccine or saline, variable intervals 4-12w
    - No severe disease or hospitalizations in pooled results
    - 70% efficacy based on 131 (1.1%) symptomatic >14 days after second dose
      - 62% effectiveness given 2 full doses of vaccine (N=8895)
      - 90% given half then full doses (N=2741)
  - Serial PCR testing was performed and indicated 62% efficacy in preventing asymptomatic transmission
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# Dec 30 UK Regulatory Considerations

- 30 Dec approved in UK with new interpretations:
  - No serious adverse events
  - 70% efficacy against symptomatic disease
    - Higher efficacy of half dose not substantiated
  - Insufficient data (<10%) for  $\geq 65y$
  - Efficacy data after single dose not interpretable
- Experimental approach to give as many persons as possible 1 dose rather than holding back supplies for 2<sup>nd</sup>
- Jan 3 India approved a version called Covishield

## Interesting Interval Data Emerging

Among 17,177 participants in  
Brazil, South Africa, UK

- D22-D90 post single dose: 76% efficacy against symptomatic infection and 100% efficacy against hospitalization
- Efficacy after 2 doses
  - 82% if given  $\geq 90$  days (12.8w) apart
  - 55% with <6w interval

Longer follow up continues to suggest reduction in transmission based on 2 doses reducing any PCR+ by 54% (c/w previous 62%)



# Early March Blood Clot Reports Emerge in AZ Global Rollout

- Initial report of 7 cases of multiple blood clots and 18 cases of cerebral venous sinus thrombosis, which have been reported in ~20M recipients
- >20 countries suspended rollout
- EMA preliminary analysis found no association between vaccine and thrombotic events, and no evidence indicates that clotting events were associated with a specific batch
  - Potential association between the vaccine and "very rare cases of blood clots associated with thrombocytopenia," but further analysis is needed

# WHO statement on AstraZeneca COVID-19 vaccine safety signals

17 March 2021 | Statement | Reading time: Less than a minute (220 words)

Some countries in the European Union have temporarily suspended use of the AstraZeneca COVID-19 vaccine as a precautionary measure based on reports of rare blood coagulation disorders in persons who had received the vaccine. Other countries in the EU – having considered the same information - have decided to continue using the vaccine in their immunization programmes.

Vaccination against COVID-19 will not reduce illness or deaths from other causes. Thromboembolic events are known to occur frequently. Venous thromboembolism is the third most common cardiovascular disease globally.

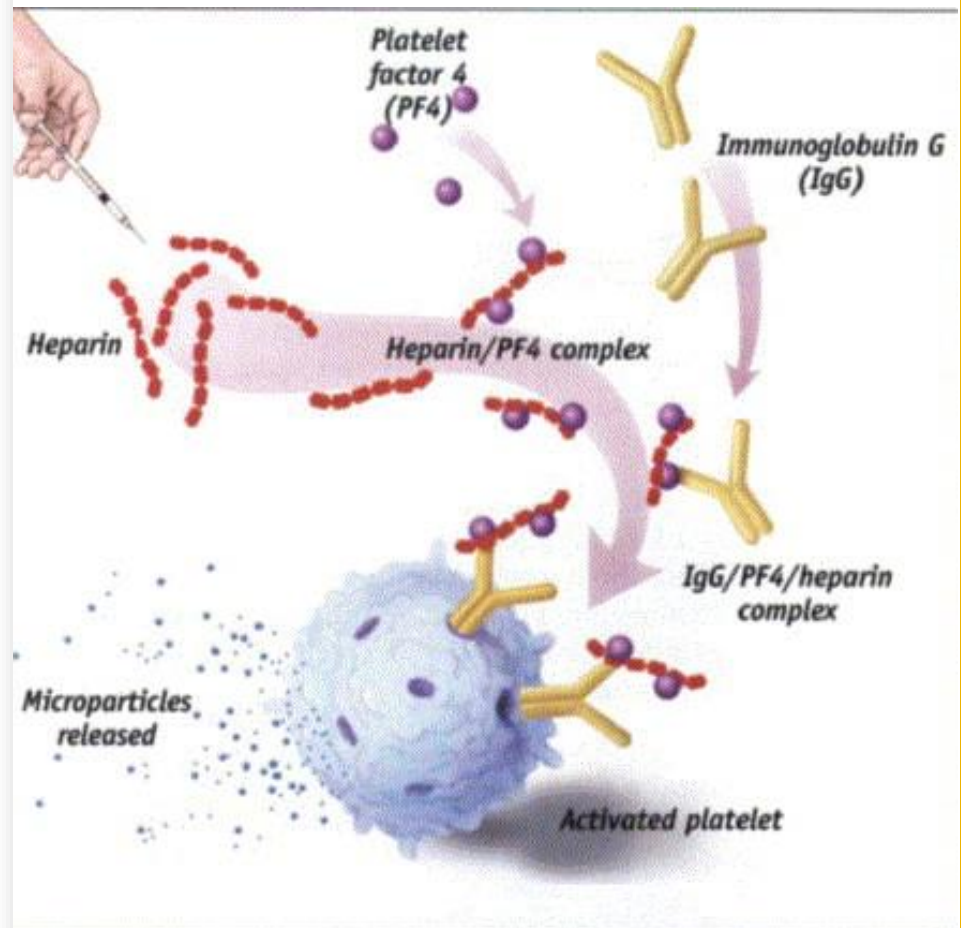
In extensive vaccination campaigns, it is routine for countries to signal potential adverse events following immunization. This does not necessarily mean that the events are linked to vaccination itself, but it is good practice to investigate them. It also shows that the surveillance system works and that effective controls are in place.

WHO is in regular contact with the European Medicines Agency and regulators around the world for the latest information on COVID-19 vaccine safety. The WHO COVID-19 Subcommittee of the Global Advisory Committee on Vaccine Safety is carefully assessing the latest available safety data for the AstraZeneca vaccine. Once that review is completed, WHO will immediately communicate the findings to the public.

At this time, WHO considers that the benefits of the AstraZeneca vaccine outweigh its risks and recommends that vaccinations continue.

# Update and Independent Investigation into Pathophysiology

- Two German teams simultaneously announced in PR this week they identified cause
- University of Greifswald: analyzed 13 cases of cerebral venous sinus thrombosis
  - 12 women, all under 55yo
  - Occurred 4-16d after the dose
  - In 4/13 isolated autoantibodies against platelets
    - Part of the robust immunity the vaccine induces
    - Completely analogous to [heparin-induced thrombocytopenia \(HIT\)](#)
- Oslo University: analyzed 3 cases; no clotting history
  - Identified autoantibodies



# Top-Line Results for Phase 3 US Trial

Placebo-controlled homogenous trial 2 doses 4w apart in 32,449 in US, Chile, Peru, including 60% pre-existing conditions, 22% R/E minorities

VE 79% at preventing symptomatic COVID-19 and 100% efficacy at preventing severe disease and hospitalization

- To date, 141 disease events accrued, 5 severe events in placebo group
- Of the 20% of participants  $\geq 65$  years, VE was 80%
- VE consistent across ethnicity and in those with comorbid conditions

Favorable overall safety profile

- No increased risk of thrombosis or similar clotting abnormalities among the 21,583 participants receiving  $\geq 1$  dose

No data on extended intervals between doses are available from this trial



# Another Twist in the Road for AZ

- March 22, Data and Safety Monitoring Board (DSMB) notified NIAID, BARDA, and AstraZeneca that it was concerned by information released by AstraZeneca in top-line release:
- “The DSMB expressed concern that AstraZeneca may have included outdated information from that trial, which may have provided an incomplete view of the efficacy data. We urge the company to work with the DSMB to review the efficacy data and ensure the most accurate, up-to-date efficacy data be made public as quickly as possible.”
- Urged report of VE 69-74% (vs “79%”)
  - March 25 update to 76%



# AZ Status Report

Authorized in >100 countries

>20M doses given in EU and UK, and >27M given as India's version Covishield

WHO EUL accelerated pathway to 170M doses in 142 countries through the COVAX Facility; recommends 8-12w interval between doses

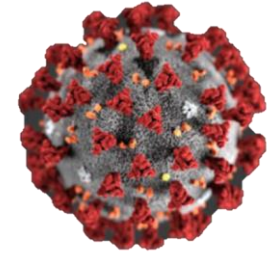
FDA EUA application within several weeks, decision (likely approval) by late April

- FDA authorization is important for worldwide acceptance of the vaccine, but need for vaccine in the US is not clear

3B doses expected in 2021

- Likely not protective against VOC B.1.351; RSA halted
- Feb collaboration with Sputnik to increase VE
- March 18 US announced sending millions of doses to Mexico and Canada
- Studies for children beginning

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