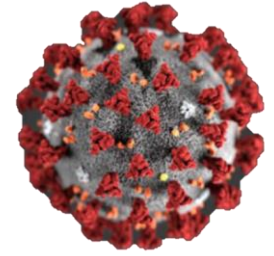


# New Hampshire Coronavirus Disease 2019 Weekly Call for Healthcare Providers and Public Health Partners



February 11, 2021

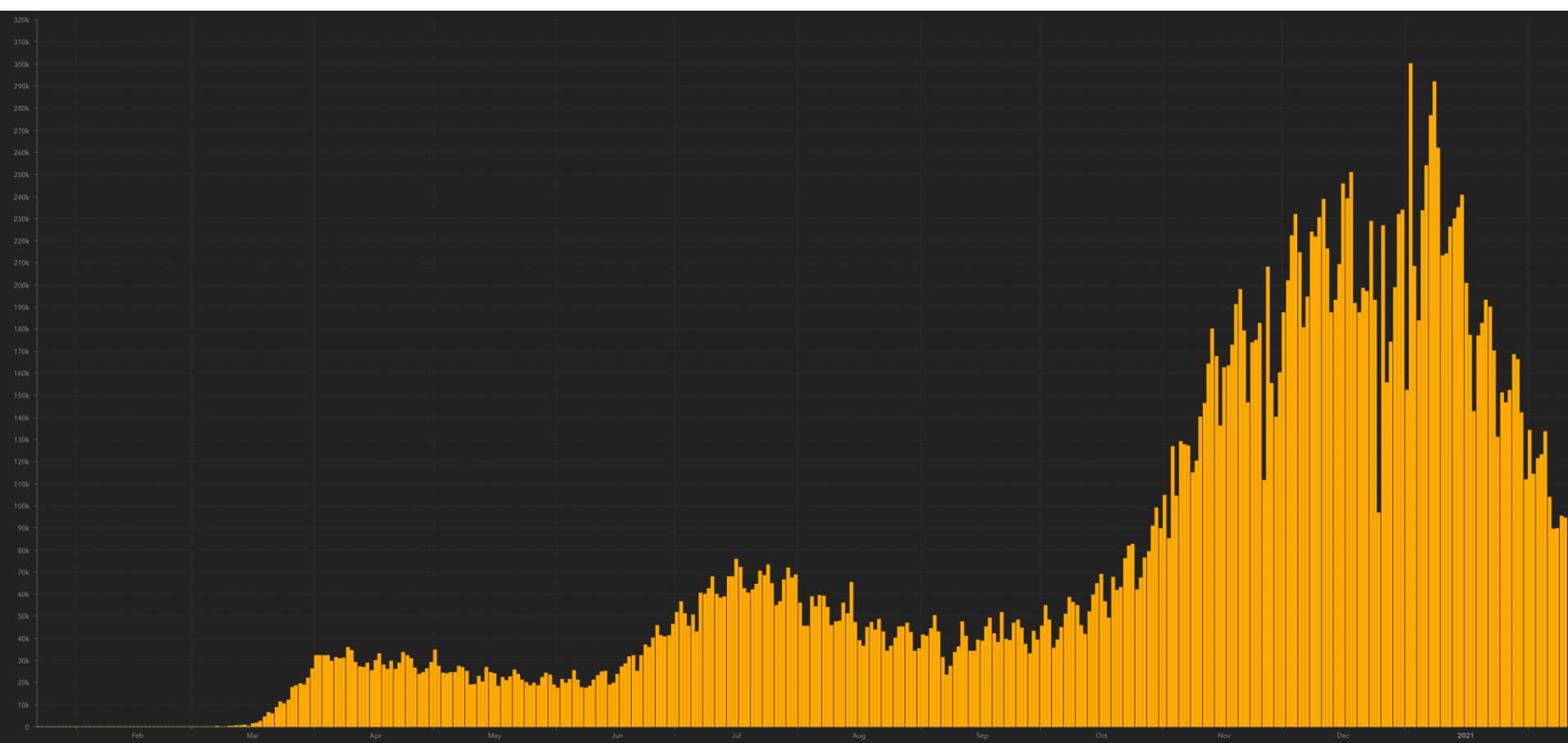
*Ben Chan  
Elizabeth Talbot  
Beth Daly  
Lindsay Pierce*

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

# Agenda

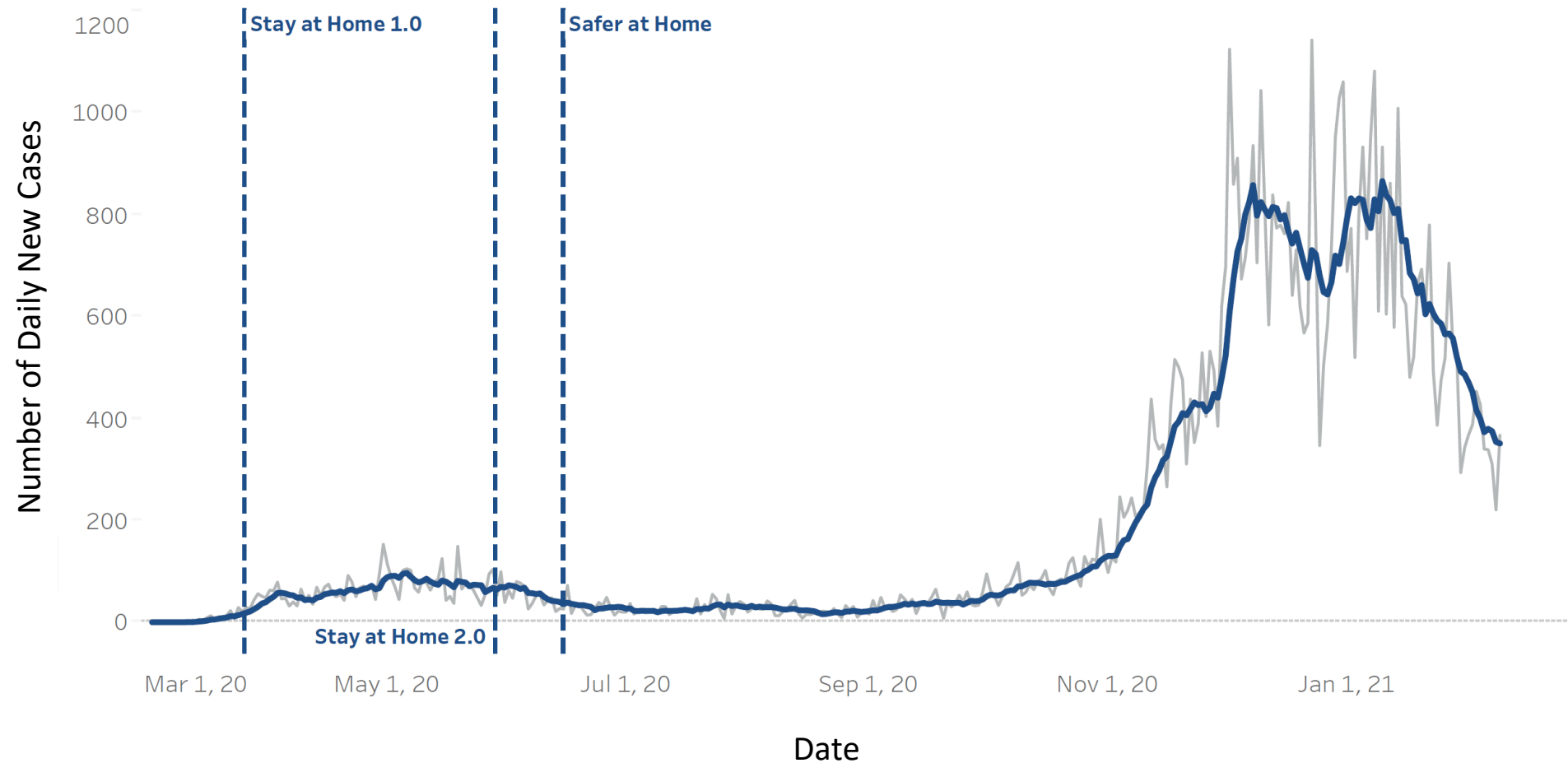
- Epidemiology Update
- MMWR article: [Maximizing Fit for Cloth and Medical Procedure Masks to Improve Performance and Reduce SARS-CoV-2 Transmission and Exposure](#)
- Updates to CDC's [Interim Clinical Considerations for the Use of mRNA COVID-19 Vaccines](#)
- Ellume Home COVID-19 Test
- Questions & Answers (Q&A)

# National Daily Incidence of COVID-19



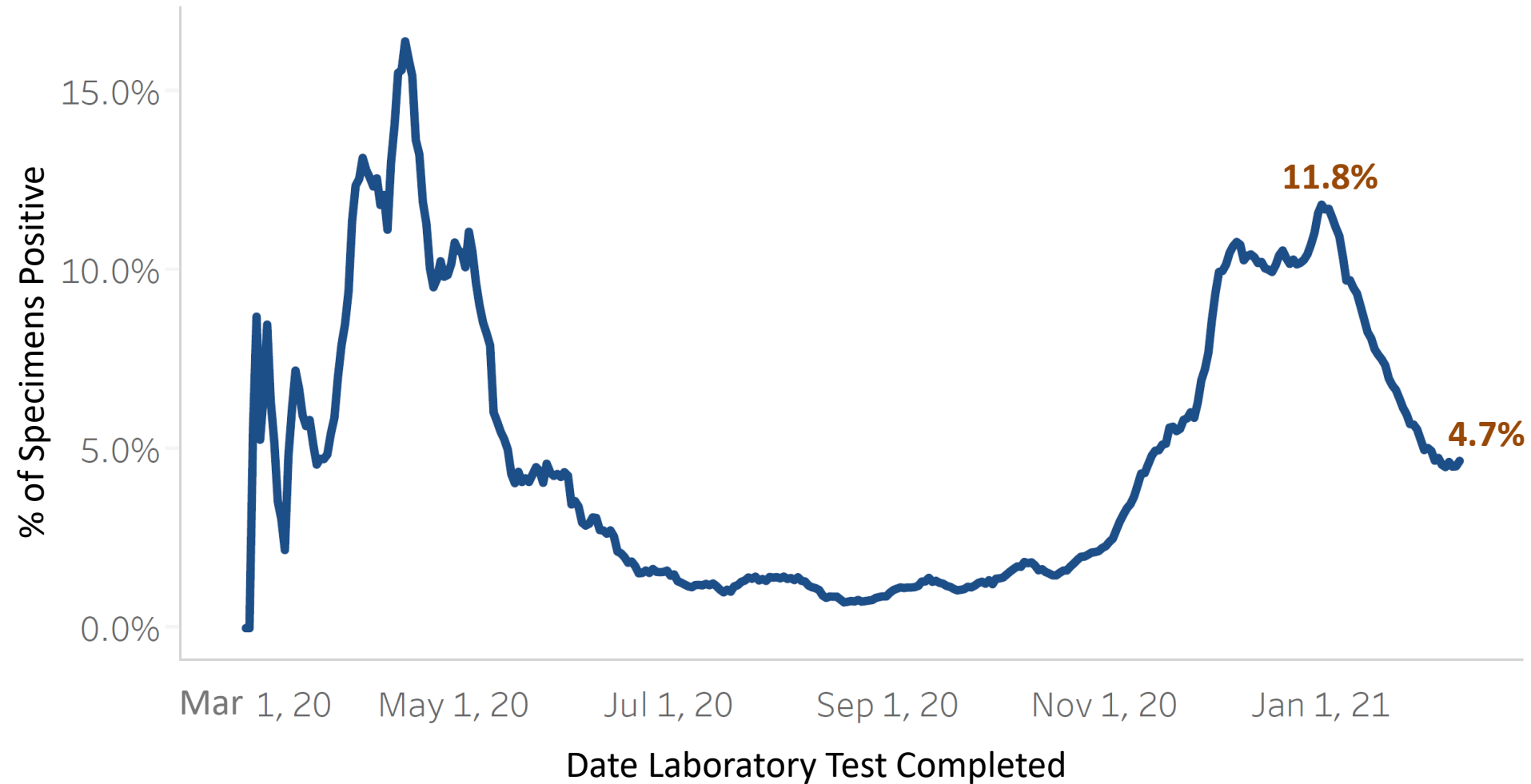
- More than 27.2 million cumulative cases in the U.S. (25% of all global infections)
- More than 470,000 deaths in the U.S. from COVID-19 (20% of all global deaths)

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

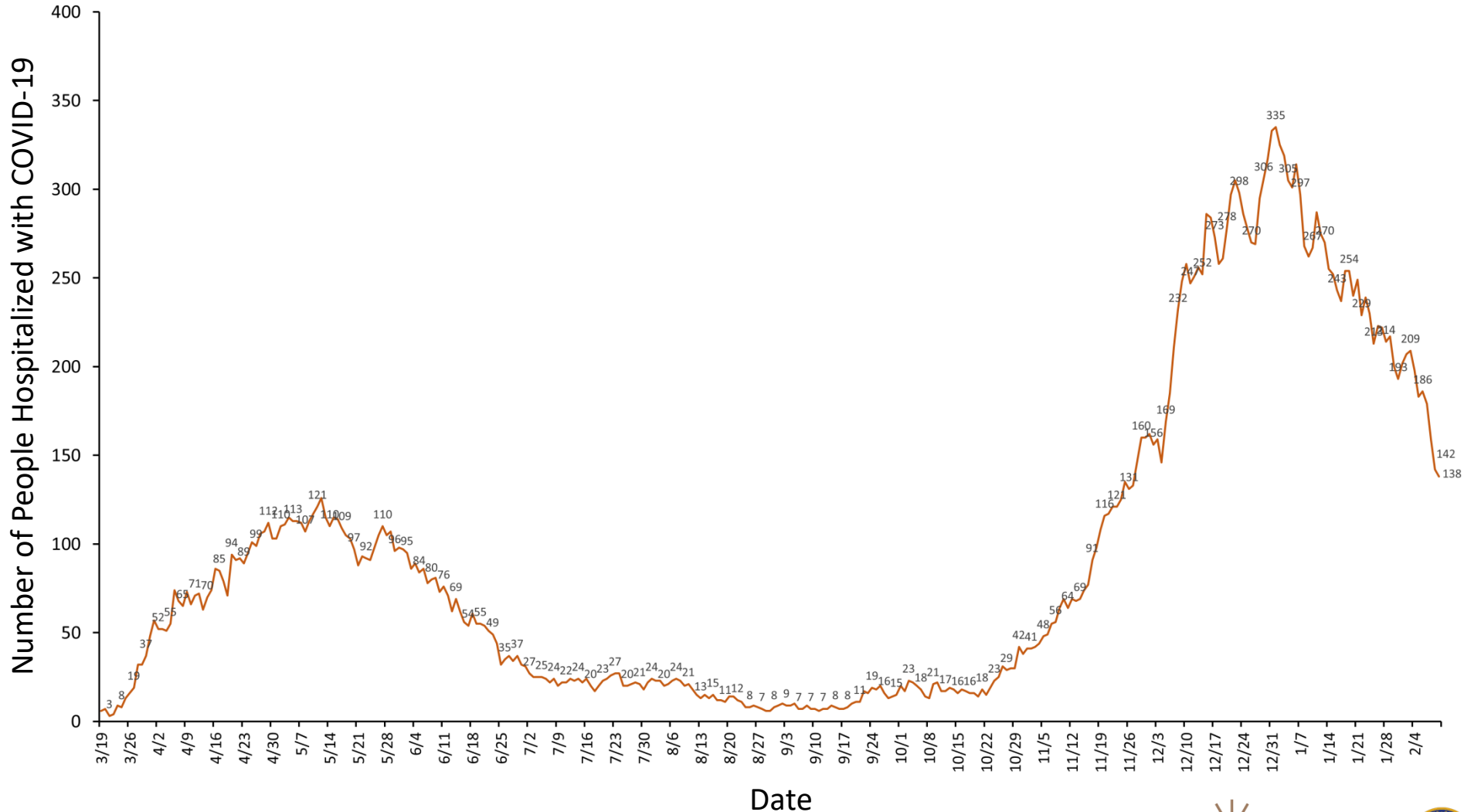


<https://www.nh.gov/covid19/dashboard/overview.htm#dash>

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



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

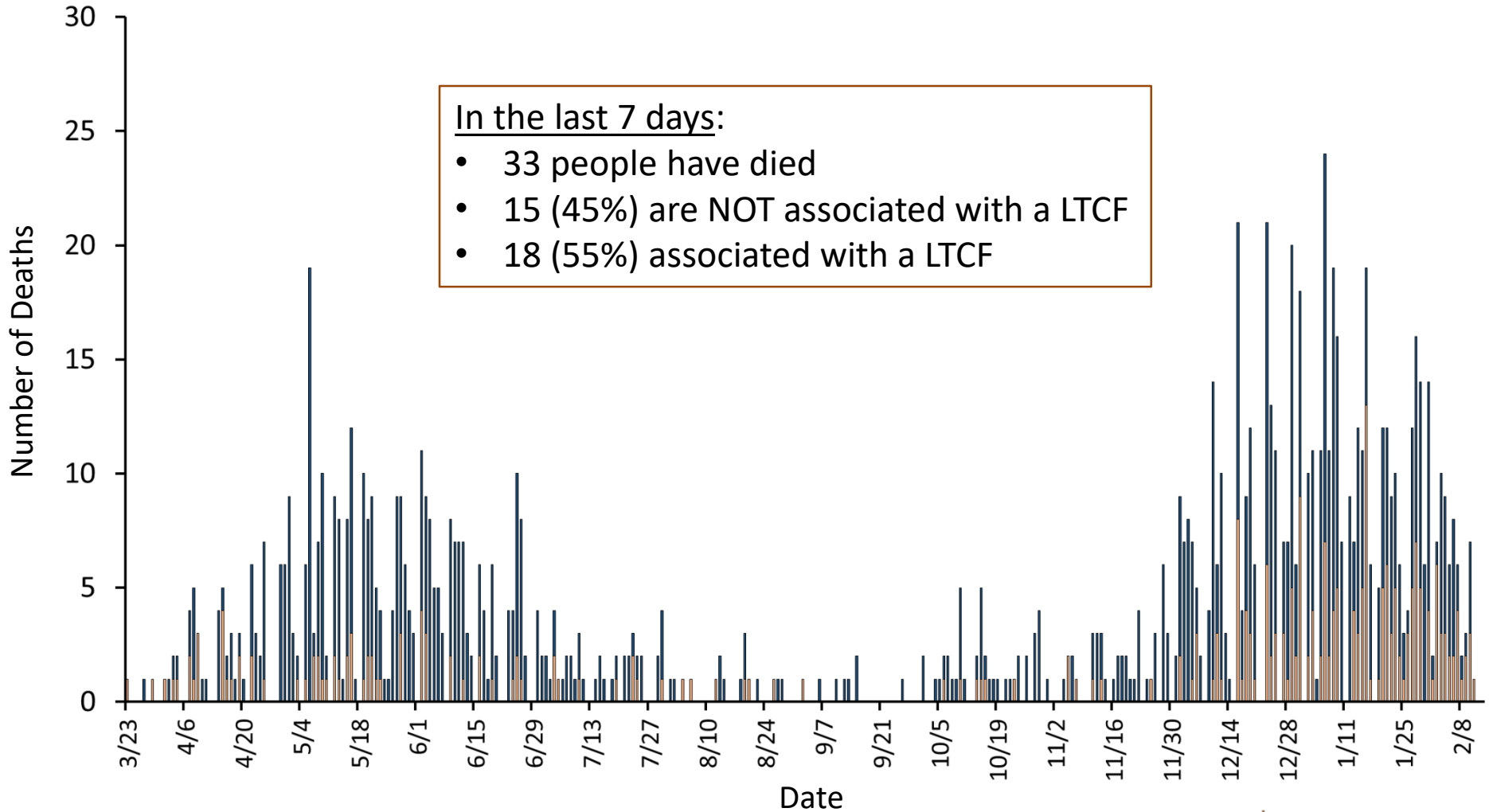


# Number of COVID-19 Deaths in NH by Report Date

■ Non-LTCF Associated    ■ LTCF Associated

In the last 7 days:

- 33 people have died
- 15 (45%) are NOT associated with a LTCF
- 18 (55%) associated with a LTCF



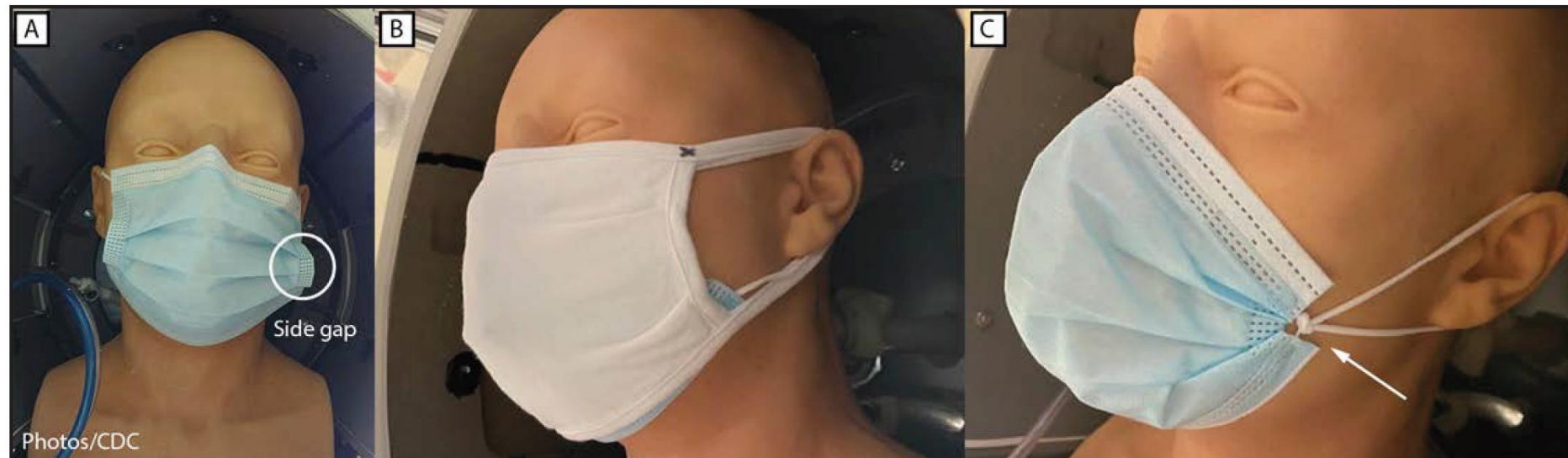
# MMWR Article: Maximizing Fit for Face Masks to Improve Performance and Reduce SARS-CoV-2 Transmission



## Maximizing Fit for Cloth and Medical Procedure Masks to Improve Performance and Reduce SARS-CoV-2 Transmission and Exposure, 2021

- CDC laboratory experiments to assess methods to improve face mask performance by improving fit (and hence source control and filtration):
  - Double masking
  - Knotting and tucking
- Assessed:
  - Source control: amount of particles emitted during a cough
  - Exposure: to aerosols during a period of breathing

FIGURE 1. Masks tested, including A, unknotted medical procedure mask; B, double mask (cloth mask covering medical procedure mask); and C, knotted/tucked medical procedure mask



- Mask fit must be individualized - the size and shape of everybody's face is different
  - Knotting and tucking can change the size/shape of the mask so it no longer fully covers the nose and mouth on a larger face
  - Double masking may make it more difficult to breath or cause increased touching/adjust of mask

# Knot and Tuck Instructional Video

<https://www.youtube.com/watch?v=UANi8Cc71A0&feature=youtu.be>

<https://www.youtube.com/watch?v=UANi8Cc71A0&feature=youtu.be>

FIGURE 2. Mean cumulative exposure\* for various combinations of no mask, double masks, and unknotted and knotted/tucked medical procedure masks†

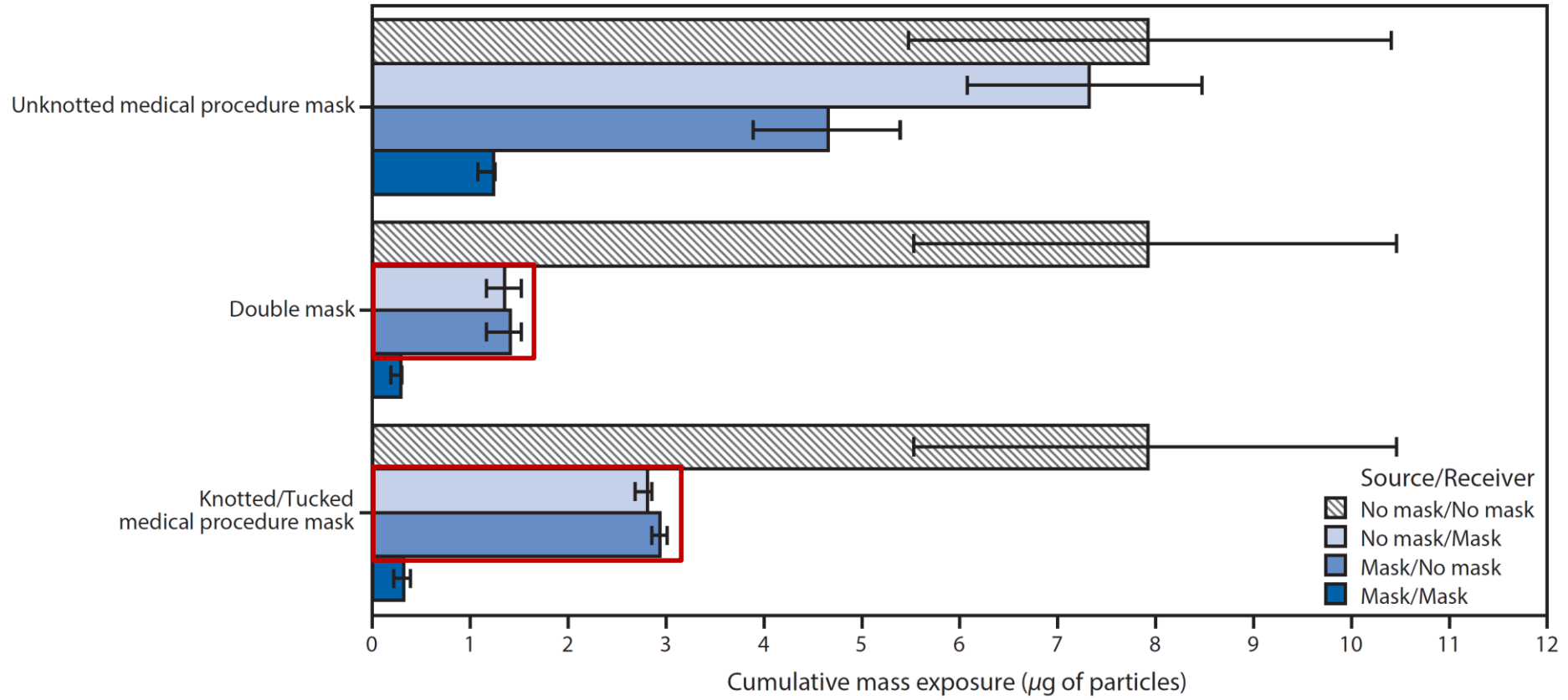
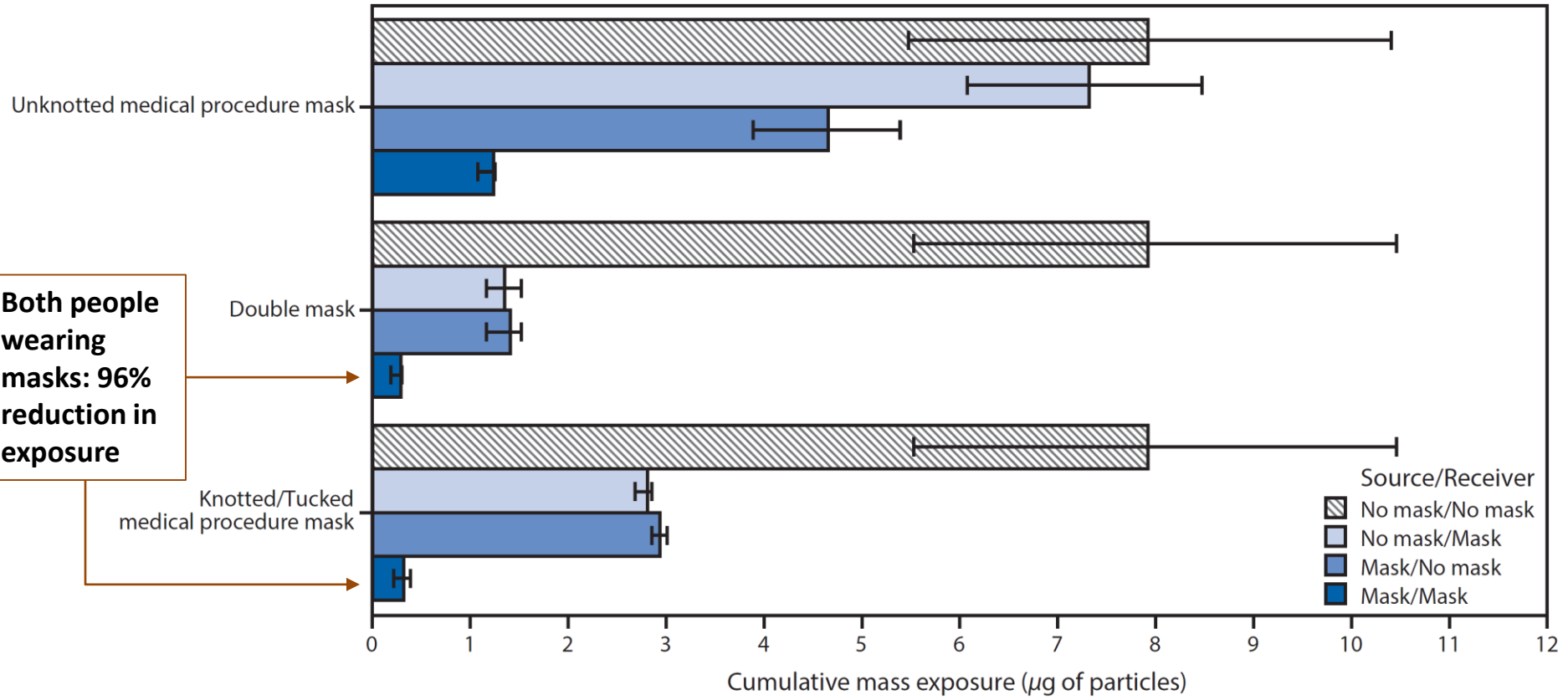


FIGURE 2. Mean cumulative exposure\* for various combinations of no mask, double masks, and unknotted and knotted/tucked medical procedure masks†



**Both people wearing masks: 96% reduction in exposure**

# Key Points of This Study

- A person's exposure was maximally reduced (>95%) when:
  - Both people are masked (source patient and exposed person)
  - Both wore modified close-fitting medical procedure masks
- Better fit leads to better source control, filtration, and reduced exposure
- Better fit can be accomplished in a variety of different ways:
  - Using a better fitted mask (upgrade your mask)
  - “Double masking”: wearing a cloth mask over a medical procedure mask  
(Nylon hosiery sleeve pulled up over a mask has also been studied)
  - “Knotted and tucked masks”
  - “Mask fitters” that improve the fit of masks when worn over the mask

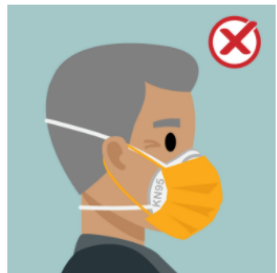
# CDC Face Mask Do's/Don't's

## Do NOT



Combine two disposable masks

- Disposable masks are not designed to fit tightly and wearing more than one will not improve fit.



Combine a KN95 mask with any other mask.

- Only use one KN95 mask at a time.

- Double masking isn't just about increasing the number of layers over your nose and mouth. More masks isn't necessarily better.
- The MMWR study looked specifically at a cloth face mask placed over a disposable medical face mask
- Primary goal of double masking is to improve the fit and eliminate gaps!

## Do



### Choose a mask with a **Nose Wire**

- A nose wire is a metal strip along the top of the mask
- Nose wires prevent air from leaking out of the top of the mask.
- Bend the nose wire over your nose to fit close to your face.



### Use a **Mask Fitter or Brace**

- Use a mask fitter or brace over a disposable mask or a cloth mask to prevent air from leaking around the edges of the mask.



### Check that it **Fits Snugly** over your nose, mouth, and chin

- Check for gaps by cupping your hands around the outside edges of the mask.
- Make sure no air is flowing from the area near your eyes or from the sides of the mask.
- If the mask has a good fit, you will feel warm air come through the front of the mask and may be able to see the mask material move in and out with each breath.



### Add **Layers** of material

#### 2 ways to layer

- Use a cloth mask that has multiple layers of fabric.
- Wear one disposable mask underneath a cloth mask.
  - The second mask should push the edges of the inner mask against your face.



# Public Health Recommendations

- Everybody is better protected when we all wear masks
- Upgrade your mask and find a better fit
- People should wear a multi-layered mask (minimum: 2-3 layers)
- Mask should be well fitted to the face and cover both the nose and mouth
- Masks that pinch and form over the bridge of the nose are better
- Additional steps can be considered to increase the fit of your mask:
  - “Knot and tuck”
  - Use a mask fitter
  - double mask is an option, but it should be with a cloth face mask over a multi-layered disposable medical procedure-type mask
- Masks shouldn't cause a person to fidget with mask or touch face

# Update to CDC's Interim Clinical Considerations for Use of the mRNA COVID-19 Vaccines

## Summary of recent changes (last updated February 10, 2021):

- New recommendations for preventing, reporting, and managing mRNA COVID-19 vaccine administration errors (Appendix A).
- Clarification on contraindications and precautions. Persons with a known (diagnosed) allergy to PEG, another mRNA vaccine component, or polysorbate, have a contraindication to vaccination. Persons with a reaction to a vaccine or injectable therapy that contains multiple components, one of which is PEG, another mRNA vaccine component or polysorbate, but in whom it is unknown which component elicited the immediate allergic reaction have a precaution to vaccination.
- Updated information on delayed, local injection-site reactions after the first mRNA vaccine dose. These reactions are neither a contraindication or precaution to the second dose.
- Updated quarantine recommendations for vaccinated persons. Fully vaccinated persons who meet criteria will no longer be required to quarantine following an exposure to someone with COVID-19. Additional considerations for patients and residents in healthcare settings are provided.
- Additional information and updated recommendations for testing for TB infection. TB testing can be done before or at the same time as mRNA COVID-19 vaccination, or otherwise delayed for  $\geq 4$  weeks after the completion of mRNA COVID-19 vaccination.

# No Change to Contraindications & Precautions

	CONTRAINDICATION TO VACCINATION	PRECAUTION TO VACCINATION
ALLERGIES	<p>History of the following are contraindications to receiving either of the mRNA COVID-19 vaccines*:</p> <ul style="list-style-type: none"> <li>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose of an mRNA COVID-19 vaccine or any of its components</li> <li>• Immediate allergic reaction<sup>†</sup> of any severity to a previous dose of an mRNA COVID-19 vaccine or any of its components<sup>^</sup> (including polyethylene glycol)<sup>#</sup></li> <li>• Immediate allergic reaction of any severity to polysorbate<sup>^#</sup></li> </ul>	<p>Among persons without a contraindication, a history of:</p> <ul style="list-style-type: none"> <li>• Any immediate allergic reaction<sup>†</sup> to other vaccines or injectable therapies<sup>*</sup></li> </ul>
ACTIONS	<ul style="list-style-type: none"> <li>• Do not vaccinate<sup>#</sup></li> <li>• Consider referral to allergist-immunologist</li> </ul>	<ul style="list-style-type: none"> <li>• Risk assessment</li> <li>• 30-minute observation period if vaccinated</li> <li>• Consider deferral of vaccination for further risk assessment and possible referral to allergist-immunologist</li> </ul>

# Contraindication & Precaution Clarification

- Polysorbate and polyethylene glycol (PEG) are common in many different medications and vaccines (see Table II – IV in article: [Banerji A, et al. J Allergy Clin Immunol Pract. 2020 Dec 31](#)).
- Persons with a known/diagnosed allergy specifically to PEG or polysorbate have a contraindication to vaccination (person should not be vaccinated).
- CDC clarification: “Persons with a reaction to a vaccine or injectable therapy that contains multiple components, one of which is PEG, another mRNA vaccine component or polysorbate, but in whom it is unknown which component elicited the immediate allergic reaction have a precaution to vaccination” (person can still receive the vaccine, but should be observed for 30 minutes post-vaccination)

# CDC's New Guidance for Quarantine after Full Vaccination

However, vaccinated persons with an exposure to someone with suspected or confirmed COVID-19 are not required to [quarantine](#) if they meet all of the following criteria<sup>†</sup>:

- Are fully vaccinated (i.e.,  $\geq 2$  weeks following receipt of the second dose in a 2-dose series, or  $\geq 2$  weeks following receipt of one dose of a single-dose vaccine)
- Are within 3 months following receipt of the last dose in the series
- Have remained asymptomatic since the current COVID-19 exposure
  
- Exception to no longer requiring quarantine for fully vaccinated persons (CDC guidance): “vaccinated inpatients and residents in healthcare settings should continue to quarantine following an exposure.”
  
- All fully vaccinated people need to continue to follow other mitigation measures (social distancing, face mask use, etc.) and follow travel guidance

# New Hampshire Public Health Guidance

## THIS IS AN OFFICIAL NH DHHS HEALTH ALERT

Distributed by the NH Health Alert Network  
[Health.Alert@nh.gov](mailto:Health.Alert@nh.gov)  
January 11, 2021 Time 1200 (12:00 PM EDT)  
NH-HAN 20210111



### **Coronavirus Disease 2019 (COVID-19) Outbreak, Update # 33** *COVID-19 Vaccination Allocation Plan Update* *Quarantine Guidance Update*

#### **Key Points and Recommendations:**

- NH DPHS quarantine guidance for people who are fully vaccinated or previously infected with SARS-CoV-2 has been updated ([Quarantine Guide](#)). This guidance applies to the general public, businesses, schools, and healthcare facilities, including long-term care facilities (LTCFs) and assisted living facilities (ALFs). The following people do NOT need to quarantine after an unprotected exposure to a person with COVID-19, or after travel outside of New England:
  - A person who is 14 days beyond the second dose of their COVID-19 vaccine (i.e., 14 days after full vaccination).
  - A person who is within 90 days of a prior SARS-CoV-2 infection diagnosed by PCR or antigen testing.

# New Hampshire Public Health Guidance

- NH [HAN Update #33](#) remains our current/active guidance
- Our quarantine guidance after full vaccination is NOT time-bound (however, we reserve the right to change guidance if needed)
- We do not differentiate/split guidance based on setting:
  - “This guidance applies to the general public, businesses, schools, and healthcare facilities, including long-term care facilities (LTCFs) and assisted living facilities (ALFs).”
- Healthcare facilities, including hospitals and LTCFs/ALFs can choose to quarantine fully vaccinated patients/residents after a new exposure if desired, but it is not required by NH DPHS
- Regardless of prior infection or vaccination status, any person with new or unexplained symptoms of COVID-19 must still isolate and be evaluated for COVID-19 testing



# Active Diagnostic Pipeline

- FDA has authorized > 225 diagnostic tests for COVID-19
  - 25 allow for home collection of samples, which are then sent to a lab for testing
    - Nov 17 Lucira COVID-19 All-In-One Test Kit: real-time loop mediated amplification reaction, first **prescription** at-home or at POC for  $\geq 14$ yo
      - Requires patient or provider to report
    - Dec: first **nonprescription**, self-collected with lab processing



## Ellume COVID-19 Home Tests (Ellume Limited; Australia)

Over-the-counter, nonprescription,  
completely at-home, self-collection  
antigen test

- Midturbinate specimens of symptomatic or asymptomatic persons aged  $\geq 2$  years
- Uses Bluetooth-connected analyzer in conjunction with smartphone app to provide results in  $\leq 15$  minutes
- App requires individuals to input their name, DOB, zip code and e-mail address, and reports the results to public health

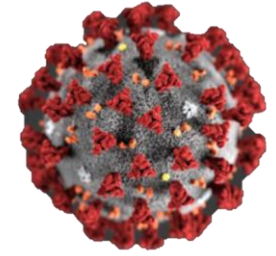


# FDA EUA for Ellume Dec 14

- Among symptomatic persons, correctly identified 96% of positive samples and 100% of negative samples
- Among asymptomatic persons, correctly identified 91% of positive samples and 96% of negative samples
- US Gov contracted for onshore production and purchase of 8.5M
  - Production 640,000 tests per month



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