# Maine DHHS

# **COVID-19 Vaccines Clinical Updates**

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August 2021



# COVID-19 Vaccines Discussion

- Overview of current COVID-19 vaccines & recent updates
- COVID vaccine adverse events
  - Pericarditis/myocarditis
  - How to report adverse reactions (VAERS)
- Current status of COVID-19 variants
- Breakthrough COVID infections in vaccinated individuals
- Recent US CDC changes to masking recommendations
- Q&A

# Current COVID-19 Vaccines: Key Similarities & Differences

#### **Pfizer BioNTech**

- mRNA vaccine
- Trial with >44,000 in multp countries
- Efficacy 94.5%
- Minimal adverse reactions
- 2<sup>nd</sup> dose at 21D
- Auth'd for ≥12yo
- Can be refridg'd for 30D

#### Moderna

- mRNA vaccine
- Trial with >30,000 in US
- Efficacy >94.1%
- Minimal adverse reactions
- 2<sup>nd</sup> dose at 28D
- Auth'd for ≥18yo
- Can be refridg'd for 30D

#### J&J/Janssen

- Viral vector vaccine
- Trial with >43,800 in multp countries
- Efficacy >66.1% overall, 72% in US
- Minimal adverse reactions
- Single dose only
- Auth'd for ≥18yo
- Can be stored at room temp

## COVID-19 Vaccines: What's New?

- FDA continues to track vaccine stability over time, has updated "shelf-life" times for all vaccines
- Pfizer & Moderna have filed for full FDA approval for vaccines ages 12yo & above; FDA review process underway
  - Anticipate decision on Pfizer by early Sept 2021
  - Moderna decision likely ~6wks later
- ACIP meeting later this wk to consider potential benefits of 3<sup>rd</sup> vaccine for immunosuppressed patients
- Pfizer & Moderna are expanding clinical trials for 5-11yos, expect they will file for FDA Emergency Use Authorization (EUA) for children 5-11yo by year end

# Myocarditis & Pericarditis

- ~1000 cases of myocarditis and pericarditis have been reported after mRNA COVID vaccines (Pfizer & Moderna) in adolescents and young adults; symptoms generally mild
- Remains rare event compared to number of vaccines given
- US CDC continues to recommend COVID-19 vaccination for all people 12yo+
- Clinicians should consult US CDC <u>Clinical Considerations</u>: <u>Myocarditis and Pericarditis after Receipt of mRNA COVID-</u> <u>19 Vaccines Among Adolescents and Young Adults</u>
- Healthcare providers should report all cases of suspected myocarditis & pericarditis <u>VAERS</u>

# Reporting Adverse Events to VAERS

#### How to report an adverse event to VAERS

- Go to vaers.hhs.gov
- Submit a report online

#### For help:

Call 1-800-822-7967 Email info@VAERS.org video instructions https://youtu.be/sbCWhcQADFE

- Please send records to VAERS ASAP if contacted and asked
  - HIPAA permits reporting of protected health information to public health authorities including CDC and FDA



# What About Viral Variants?

- Variants expected as natural process of genetic mutations that occur with viral replication
- Best way to prevent emergence of more variants is through vaccination → less transmission → less viral replication → fewer opportunities for mutation
- Viral variants can cause virus to be more easily spread, potentially cause more serious disease
- Studies to date have shown all approved vaccines remain generally effective against variants

# COVID-19 – Delta Variant: Why Worry?

- Much more transmissible
- Has caused rapid spread Delta variant:
  - Early May 2021: <1% of COVID cases</li>
  - Currently: 83% of all COVID cases in US
  - Likely ~70-80% of all cases in Maine
- Presents significant risks to all, particularly unvaccinated individuals
- Reproduces faster = shorter incubation
- Produces more viruses = higher viral load

## COVID-19 Breakthrough Infection After Vaccination

- Since vaccine efficacy is ~90%, normal to have some level of "breakthrough" infection after vaccination
- Most vaccinated individuals with breakthrough infection have mild to no symptoms
- Many cases identified through routine surveillance in workplaces, etc
- Vaccines remain highly effective in preventing COVIDrelated severe disease, hospitalization, & death
- 99% of all COVID deaths were in unvaccinated individuals

# US CDC Updated Recommendations for Vaccinated Individuals: Masking (7/27/21)

- US CDC recommends that fully vaccinated people wear masks indoors when in areas with "substantial" and "high" COVID-19 transmission (nearly 2/3'rds all US counties)
- To check Maine counties currently with "substantial" spread: <u>www.maine.gov/covid19/</u>
- Also rec's masking for all schools (teachers + students)
- Update driven by fact that vaccinated people infected with Delta variant can carry high levels of virus
- Masking helps protect self and others

# US CDC Updated Recommendations for Vaccinated Individuals: Testing (7/27/21)

- US CDC new recommendations for vaccinated individuals with known "close contact" COVID exposure (i.e., contact within 6' for 15mins or more):
  - Get COVID (PCR) test at 3-5D post-exposure
  - Wear mask until negative test results
  - (Vaccinated still don't need to quarantine)
- Higher risk viral levels with Delta variant mean that even vaccinated people can get COVID, and/or transmit it to others

### Maine Youth Covid-19 Vaccination Rates

 Currently, vaccine data is available by age group and county for youth. Zip code level data is available for all ages on the <u>COVID-19 Vaccination Dashboard | Covid-19 (maine.gov)</u>



## Maine Youth Covid-19 Vaccination Rates

- In mid-August, youth (age 10-19) vaccination rates (% and at least one dose) will be available at the SAU level via map
- Population estimates for each SAU come from the 2019 5year American Community Survey ZIP code level population estimates.
  - Data suppressed if <5 students in this age gro
  - up in the SAU
  - Youth vaccination rates reported to the Maine CDC through ImmPact

## School Staff Vaccination Rates & Reporting

- High vaccination rates help ensure school safety
- Facilitates in-person learning and protects vulnerable students and staff
- DHHS is requiring school staff to report COVID 19 vaccine rates effective September 1
- Vaccination rates (%) will be publicly posted to guide local decision-making safety policies
- Public reporting will resemble the <u>Maine Health Care</u> <u>Worker COVID-19 Vaccination Dashboard</u>

## How to Assist Schools/SAUs to Raise Rates

1. Partner with SAUs: SAUs can complete a survey/application with COVID vaccination plans for 2021-2022. They can request help connecting to a vaccine provider through this link: <u>2021-22 School COVID Vaccine</u> <u>Clinic Survey and Application</u>

2. Share community/family resources for vaccination: <u>COVID-19 Vaccine Information & Resources</u>

3. Participate in community forums with schools, local medical and public health experts

 Learn about additional resources about hosting a vaccination clinic in the <u>School Location Vaccine Clinic (SLVC)</u> <u>Toolkit</u>

# Maine Immunization Program Communications Regarding Schools

- Sent letter to Providers on <u>Preparing Students for 2021-22 School Year</u>
  <u>8 4 21.pdf</u> with focus on required school vaccines
- Hosting Webinar: Thursday, August 12<sup>th</sup> at noon, "Connecting Providers and Schools for COVID-19 Administration"
- As 2021-22 school year quickly approaches, we will be focusing efforts on promoting COVID-19 vaccination for adolescents within schools and community settings
- COVID-19 vaccination available for all children 12 years of age and older and will be the key to keeping Maine's COVID-19 cases down throughout the school year
- If you are school nurse and interested in supplying COVID-19 vaccine to your students or are a provider interested in partnering with a local school to provide the COVID-19 vaccination, please join the Maine Immunization Program for virtual meeting to discuss plans for the fall. <u>Zoom Meeting</u> link.



- Questions?
- Other issues?

# Additional COVID Vaccine Resources

- <u>Coronavirus Disease 2019 (COVID-19) | US CDC</u>
- <u>COVID-19 Vaccine Communication Toolkit for</u>
  <u>Community-Based Organizations: Getting Started | CDC</u>
- Maine COVID-19 Vaccines (maine.gov)
- <u>Maine COVID-19 Vaccines FAQ</u>
- Maine COVID-19 Vaccination Sites
- <u>Maine COVID-19 Vaccination Dashboard</u>

### Presenters

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