NEW JERSEY EMT
COVID-19 VACCINATION TRAINING
OBJECTIVES

- Discuss the requirements for a NJ EMT to administer the COVID-19 vaccine
- Discuss and review the different COVID-19 vaccines
- Review the intramuscular (IM) medication procedure
- Discuss the contraindications, precautions and side effects of the COVID-19 vaccine
REQUIREMENTS

- A New Jersey EMT may administer the COVID-19 vaccines **ONLY if ALL** the following have been met and/or adhered to:
  - ≥ 18 years of age
  - Possession of a valid New Jersey EMT Certification
  - Possession of a valid CPR Certification (Professional/Healthcare Provider Level)
  - Successful completion of the New Jersey EMT COVID-19 Vaccination Training Program
    - Psychomotor and Cognitive Examination (Passing score of 80%)
  - Successful demonstration of skill competency with Intramuscular (IM) injection and vaccine administration
  - A physician, nurse practitioner, physician assistant, registered nurse, or pharmacist directly supervises the EMT in administering the vaccine (max. 3 EMTs for every 1 supervisor)
VACCINE OVERVIEW
### PFIZER-BIONTECH
(AGES 12+)

<table>
<thead>
<tr>
<th>Type of Ingredient</th>
<th>Ingredient</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Messenger ribonucleic acid (mRNA)</td>
<td>Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2</td>
<td>Provides instructions the body uses to build a harmless piece of protein from the virus that causes COVID-19. This protein causes an immune response that helps protect the body from getting sick with COVID-19 in the future.</td>
</tr>
<tr>
<td>Lipids (fats)</td>
<td>2[(polyethylene glycol (PEG);2000)-N,N-ditetradecylacetamide</td>
<td>Work together to help the mRNA enter cells.</td>
</tr>
<tr>
<td></td>
<td>1,2-distearoyl-sn-glycero-3-phosphocholine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cholesterol (plant derived)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4-hydroxybutyl)azanediy]bis(hexane-6,1-diyl]bis(2-hexyldecanoate)</td>
<td></td>
</tr>
<tr>
<td>Salts and sugar</td>
<td>Dibasic sodium phosphate dihydrate</td>
<td>Work together to help keep the vaccine molecules stable while the vaccine is manufactured, frozen, shipped, and stored until it is ready to be given to a vaccine recipient.</td>
</tr>
<tr>
<td></td>
<td>Monobasic potassium phosphate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Potassium chloride (common food salt)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sodium chloride (basic table salt)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sucrose (basic table sugar)</td>
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# Pfizer-BioNTech (Ages 5-11)

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<td>Provides instructions the body uses to build a harmless piece of a protein from the virus that causes COVID-19. This protein causes an immune response that helps protect the body from getting sick with COVID-19 in the future.</td>
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| Lipids (fats)      | • 2[(polyethylene glycol (PEG)-2000]-N,N-ditetradecylacetamide  
                    • 1,2-distearoyl-sn-glycero-3-phosphocholine  
                    • Cholesterol (plant derived)  
                    • ((4-hydroxybutyl)azanediyi)b(is(hexane-6,1-diyl)b(is(2-hexyldecanoate) | Work together to help the mRNA enter cells.                                                                                                                                                                  |
| Sugar and acid stabilizers | • Sucrose (table sugar)  
                    • Tromethamine  
                    • Tromethamine hydrochloride | Work together to help keep the vaccine molecules stable while the vaccine is manufactured, frozen, shipped, and stored until it is ready to be given to a vaccine recipient.                                               |
MODERNA
(AGE ≥ 18)

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| Lipids (fats)            | • PEG2000-DMG: 1,2-dimyristoyl-rac-glycerol, methoxypolyethylene glycol  
                          • 1,2-distearoyl-sn-glycero-3-phosphocholine  
                          • BotaniChol® (non-animal origin cholesterol)  
                          • SM-102: heptadecane-9-yl 8-((2-hydroxyethyl) (6-oxo-6-(undecyloxy) hexyl) amino) octanoate | Work together to help the mRNA enter cells.                                                                                                                                                              |
| Salt, sugar, acid stabilizers, and acid | • Sodium acetate  
                          • Sucrose (basic table sugar)  
                          • Tromethamine  
                          • Tromethamine hydrochloride  
                          • Acetic acid (the main ingredient in white household vinegar) | Work together to help keep the vaccine molecules stable while the vaccine is manufactured, frozen, shipped, and stored until it is ready to be given to a vaccine recipient. |
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<td>A harmless version of a virus unrelated to the COVID-19 virus</td>
<td>• Recombinant, replication-incompetent Ad26 vector, encoding a stabilized variant of the SARS-CoV-2 Spike (S) protein</td>
<td>Provides instructions the body uses to build a harmless piece of a protein from the virus that causes COVID-19. This protein causes an immune response that helps protect the body from getting sick with COVID-19 in the future.</td>
</tr>
<tr>
<td>Sugars, salts, acid, and acid stabilizer</td>
<td>• Polysorbate-80</td>
<td>Work together to help keep the vaccine molecules stable while the vaccine is manufactured, shipped, and stored until it is ready to be given to a vaccine recipient.</td>
</tr>
<tr>
<td></td>
<td>• 2-hydroxypropyl-β-cyclodextrin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Trisodium citrate dihydrate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sodium chloride (basic table salt)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Citric acid monohydrate (closely related to lemon juice)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ethanol (a type of alcohol)</td>
<td></td>
</tr>
</tbody>
</table>
VACCINATION PROCEDURE

- Recipient screening conducted (not by the EMT)
- A vaccine will be provided to the EMT in a syringe, with a capped needle attached
- The EMT will then:
  - Ensure appropriate monitoring equipment and treatment supplies are available to manage any adverse reactions (e.g., anaphylaxis)
  - Verify completion of the COVID-19 screening and consent form
  - Ensure the “Vaccination Fact Sheet” is provided to the recipient and/or caregiver
  - Reconfirm that the recipient meets the indications for a COVID-19 vaccine and has NO contraindications
  - Determine which injection site the recipient prefers
  - Verify the “7 Rights” of the vaccine administration
THE 7 RIGHTS OF VACCINE ADMINISTRATION

The 7 Rights of Vaccine Administration

- Right Patient
- Right Vaccine or Diluent
- Right Time*
- Right Dosage
- Right Route, Needle Length, Technique
- Right Site for route indicated
- Right Documentation
  
  * Correct age, appropriate interval, and administer before vaccine or diluent expires

VACCINATION PROCEDURE

- Assure correct needle length to reach muscle
  - 5-10 years old 1-1.25 in
  - >11 years old 1-1.5 in

- Assure proper vaccine dosage
  - 5-11 years old = 0.2 mL
  - >12 years old = 0.3 mL
VACCINATION PROCEDURE CONT. (DELTOID INJECTION)

- Locate landmarks
  - Locate acromion process (bony corner of the shoulder) and find its outermost edge
  - Three finger widths down
    - With your left hand, utilizing your ring, middle and index fingers, place your ring finger just below the acromion process
    - With your right hand, utilize your middle and index fingers to create a triangle, with the tips of your middle and index fingers touching the index finger of your left hand
- Aim to administer the injection just below the index finger of your left hand
- Stay within the triangle to avoid puncturing nerves or blood vessels
VACCINATION PROCEDURE CONT. (VASTUS LATERALIS)

- Often used for infants, toddlers, and children
- Locate landmarks
  - Hand breath below greater trochanter
  - Hand breath above the knee on the anterior-lateral aspect of the thigh
  - Inject vaccine into the outer middle third of the muscle
VACCINATION PROCEDURE CONT.

- Clean the injection site utilizing a 60-70% alcohol-based solution
  - wipe the area from the center of the determined injection site, working outwards, without going over the same area, for 30 seconds
- Allow to dry for an additional 30 seconds
VACCINATION PROCEDURE OVERVIEW CONT.

- Stabilize/stretch skin if excess soft tissue (DO NOT bunch skin)
- Insert needle at a 90-degree angle with respect to the skin
- Depress the plunger (administer vaccine)
- Remove needle and syringe directly backwards at the same 90-degree angle used for insertion
- Place needle and syringe immediately into a sharp's container
  - DO NOT attempt to re-cap the needle
  - DO NOT put the needle down anywhere but in the sharps container
- Apply bandage over the area of injection
- Ensure all necessary and appropriate documentation has been completed
Instruct and/or assist the vaccine recipient to the nearby waiting area for the time allocated

- **30 Minutes**: Persons with history of:
  - A contraindication to another type of COVID-19 vaccination product
  - Immediate (within 4 hours of exposure) non-severe allergic reaction to a COVID-19 vaccine
  - Immediate allergic reaction, of any severity, to a non-COVID-19 vaccine or injectable therapies
  - Anaphylaxis due to any cause

- **15 Minutes**: All other persons
CONTRAINDICATIONS

- Anyone who has experienced a severe allergic reaction after a previous dose of the COVID-19 vaccine
- Anyone who has experienced an allergic reaction to any ingredient in the vaccine
- Age < 5 years old
- Current illness or infection
- History of severe allergic reaction to a previous dose of a vaccine or any vaccine ingredients
- Positive COVID-19 test in the last 2 weeks
- Any of the following symptoms in the last ten (10) days:
  - Fever (>100.4F),
  - Chills
  - Cough
  - Shortness of breath
  - Difficulty breathing
  - Fatigue
  - Muscle or body aches
  - Headache
  - New altered sense of taste or smell
  - Sore throat
  - Congestion or runny nose
  - Nausea
  - Vomiting
  - Diarrhea
PRECAUTIONS

- History of severe allergies or reactions to any medications, foods, vaccines, or latex
  - Monitor closely after administration (30 minutes)

- Immunocompromised or on a medication that affects the immune system.
  - Inform recipient that the vaccine might not provide as strong an immune protection.

- Bleeding disorder or taking blood thinners
  - Risk of hematoma at injection site

- Has received a first dose of another COVID-19 vaccine
  - Ensure same manufacturer as previous dose
SIDE EFFECTS

- In the arm/leg where the vaccine was administered:
  - Pain
  - Redness
  - Swelling

- Throughout the body:
  - Tiredness
  - Headache
  - Muscle Pain
  - Chills
  - Fever
  - Nausea
CONCLUSION

- Be vigilant during medication administration
- Check for accuracy
- Use STRICT aseptic technique during preparation and administration to prevent infection
- Educate the recipient and/or caregiver
- Prevent needlestick injury
- Decontaminate workspace after every administration
- Always wear appropriate PPE when administrating the vaccine
- Refer to https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html for the most up to date information, recommendations, indications, and contraindications.

***New Jersey EMTs are **ONLY** permitted to administer IM injections while acting in the capacity of a vaccinator at an approved New Jersey COVID-19 vaccination site***
THANK YOU!