

Special Protocol

(Effective through period of Commissioner's Order)

Administration of Immunizations by EMT-Basics Pursuant to a Public Health Order of the Commissioner: COVID-19 VACCINE

Vaccines for the novel Coronavirus 2019 (COVID-19), caused by the virus SARS-CoV-2, are given by injection into the muscle (IM). EMT-Basics are not trained to administer intramuscular medications, nor previously ever authorized to administer vaccinations. EMT-Basics operate in accordance with the Department's EMS System regulations and Statewide Treatment Protocols of the MDPH Office of Emergency Medical Services (OEMS), and in connection with an MDPH licensed ambulance service. They also obtain authorization to practice from their ambulance service's affiliate hospital medical director.

The specific authorization granted by the Commissioner's Order dated June 24, 2022, pursuant to the MDPH DCP regulations, 105 CMR 700.004(H), authorizes currently certified Massachusetts EMT-Basics working for an ambulance service to administer vaccine for the prevention of COVID-19, in persons covered 3 years or older covered by a vaccine authorized via an Emergency Use Authorization (EUA) from the U.S. Food and Drug Administration (FDA) (COVID-19 vaccines), in accordance with this Special Protocol issued by OEMS. Prior to being deployed by their ambulance service to administer COVID-19 vaccine, EMT-Basics must have successfully completed an IM vaccination training program as specified below.

Minimum Requirements: IM vaccination training for EMT-Basics:

Any EMT-Basic who is administering IM COVID-19 vaccination in conjunction with their ambulance service must receive training from their Affiliate Hospital Medical Director or designee.

Such training shall include:

1. Sterile technique
2. Familiarization with the equipment needed
3. How to choose needle and syringe
4. Familiarization with required consent and record keeping
5. Indications and contraindications to the vaccine in question
6. How to draw up vaccine safely and sterilely
7. How to select and prep injection site
8. How to give the injection – follow attached CDC documents, listed under Reference, below
9. Post injection site care
10. Post injection patient observation
11. Familiarization with instructions to give patient after vaccination

Total expected time of instruction: 4 hours

Ambulance service must maintain records of such training.

Reference: <https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html>

Two PDF documents are available on the OEMS website as references as well: "CDC IM-injection-adult" and "CDC ACIP Vaccine Administration".

Protocol Continues

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Protocol Continued

Deployment:

All EMT-Basics vaccinating under the Commissioner's Order must be working with at least one physician, nurse, or paramedic **immediately available** at the treatment site as the supervisor of dosing, procedure, and technique. If the treatment site is an individual's home, the physician, nurse or paramedic may be immediately available by phone or video.

EMT-Basics may not thaw or reconstitute vaccine. They are limited to drawing up doses and administering them to recipients.

EMT-Basics must be trained and authorized by their AHMD or designee prior to administering COVID-19 vaccine in any form. Under this Special Protocol, EMT-Basics can only administer vaccine while working for their ambulance service.

Such training must also include the procedures to be followed by EMT-Basics within the setting in which the vaccines are to be administered, for determining type and dose of vaccine to be given, including the identity of state who will make such determination.

EMT STANDING ORDERS

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- Provide patient, parent or legal representative with a copy of the appropriate Vaccine Information Statement (VIS) and answer any questions.
 - Screen for contraindications according to accompanying Special Protocol Appendix A1, A2 or A3, depending on the type of COVID-19 vaccine being administered, and/or the CDC/ACIP document (or ascertain the result of such screening) **EMT-BASICS MAY ONLY ADMINISTER VACCINE TO THOSE 3 YEARS OLD OR OLDER.**
 - Always check the package insert or procedural instructions prior to administering any vaccine. Follow insert or procedural instructions to prepare and draw up vaccine dose.
 - Administer IM vaccines at a 90° angle with 22-25-gauge needle. The needle length for IM injections depends upon the age, gender, and/or weight of the vaccine recipient. (See attached guide). For patients under 16 years of age, needle site must be established based on specific training, direct supervision, or local site protocols. Administer IM, according to the recommended age-specific dose and schedule. (See Special Protocol Appendix A1). Administer vaccine.
 - Observe patient for an allergic reaction for 15-30 minutes after administering vaccine. If an anaphylactic/allergic reaction occurs, treat according to Protocol 2.2A/2.2P Allergic Reaction/Anaphylaxis.
 - Report clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at 1-800-822-7967 or <http://www.vaers.hhs.gov/>.

Needle Length and Injection Site for IM Injection

| Gender and Weight | Needle Length | Injection Site | Injection Technique |
|-----------------------------------|---------------|----------------|---|
| Children (3-18 years) | 5/8" - 1" | Deltoid | Depends on Body Mass |
| Male and Female <60 kg (<130 lbs) | 5/8" | Deltoid | Do not bunch subcutaneous and muscle tissue |
| Male and Female (130-152 lbs) | 1" | | |
| Female 70-90kg (152-200 lbs) | 1"-1 ½" | | |
| Male 70kg-118kg (152-260 lbs) | | | |
| Female >90kg (200lbs) | 1 ½" | | |
| Male >118kg (260 lbs) | | | |

YOU CALL THE SHOTS

Vaccine Administration: Needle Gauge and Length

Vaccines must reach the desired tissue to provide an optimal immune response and reduce the likelihood of injection-site reactions. Needle selection should be based on the:

- Route
- Age
- Gender and weight for adults
(19 years and older)
- Injection site

The following table outlines recommended needle gauges and lengths. In addition, clinical judgment should be used when selecting needles to administer injectable vaccines.

| Route | Age | Needle gauge and length | Injection site |
|--------------------------------|--|--|--|
| Subcutaneous injection | All ages | 23–25-gauge 5/8 inch (16 mm) | Thigh for infants younger than 12 months of age ¹ ; upper outer triceps area for persons 12 months of age and older |
| Intramuscular injection | Neonate, 28 days and younger | 22–25-gauge 5/8 inch (16 mm ²) | Vastus lateralis muscle of anterolateral thigh |
| | Infants, 1–12 months | 22–25-gauge 1 inch (25 mm) | Vastus lateralis muscle of anterolateral thigh |
| | Toddlers, 1–2 years | 22–25-gauge 1–1.25 inches (25–32 mm) | Vastus lateralis muscle of anterolateral thigh ³ |
| | | 22–25-gauge 5/8 ² –1 inch (16–25 mm) | Deltoid muscle of arm |
| | Children, 3–10 years | 22–25-gauge 5/8 ² –1 inch (16–25 mm) | Deltoid muscle of arm ³ |
| | | 22–25-gauge 1–1.25 inches (25–32 mm) | Vastus lateralis muscle of anterolateral thigh |
| | Children, 11–18 years | 22–25-gauge 5/8 ² –1 inch (16–25 mm) | Deltoid muscle of arm ^{3,5} |
| | Adults, 19 years and older <ul style="list-style-type: none"> ▪ 130 lbs (60 kg) or less ▪ 130–152 lbs (60–70 kg) ▪ Men, 152–260 lbs (70–118 kg) ▪ Women, 152–200 lbs (70–90 kg) ▪ Men, 260 lbs (118 kg) or more ▪ Women, 200 lbs (90 kg) or more | 22–25-gauge 1 inch (25 mm) ⁴ 1 inch (25 mm) 1–1.5 inches (25–38 mm) 1–1.5 inches (25–38 mm) 1.5 inches (38 mm) 1.5 inches (38 mm) | Deltoid muscle of arm ^{3,5} |

¹ May be administered into the upper outer triceps area if necessary

² If the skin is stretched tightly and subcutaneous tissues are not bunched

³ Preferred site

⁴ Some experts recommend a 5/8-inch needle for men and women weighing less than 60 kg, if used, skin must be stretched tightly and subcutaneous tissues must not be bunched.

⁵ The vastus lateralis muscle in the anterolateral thigh can also be used. Most adolescents and adults will require a 1- to 1.5-inch (25–38 mm) needle to ensure intramuscular administration.

Reference: [Advisory Committee on Immunization Practices General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html](https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/administration.html)

