

Maximizing Doses of Pfizer-BioNTech COVID-19 Vaccine

Per the updated Emergency Use Authorization for [Pfizer BioNTech COVID-19 vaccine](#), allocations are calculated assuming six (6) doses per vial.

After dilution, vials of Pfizer-BioNTech COVID-19 vaccine contain six doses of 0.3mL of vaccine. Low dead-volume syringes and/or needles can be used to extract six doses from a single vial. If standard syringes and needles are used, there may not be sufficient volume to extract a sixth dose from a single vial. Regardless of the type of syringe and needle:

- **Each dose must contain 0.3 mL of vaccine.**
- **If the amount of vaccine remaining in the vial cannot provide a full dose of 0.3 mL, discard the vial and contents.**
- **Do not pool excess vaccine from multiple vials.**

You may utilize the following approaches identified by Ohio providers and federal partners to aid you in consistently achieving a six-dose draw of the Pfizer-BioNTech vaccine:

- **Approach #1**
 - Utilize a combination of three (3) standard syringes and three (3) low/zero dead-volume syringes when drawing from each vial.
 - Utilize the clinically indicated needle per below grid.
- **Approach #2**
 - Utilize a combination of four (4) standard syringes and two (2) zero dead-volume syringes when drawing from each vial.
 - Utilize the clinically indicated needle following the grid below.

The ancillary kits that are provided with each vaccine allocation often include a combination of these supplies. Providers should pay particular attention in effort to utilize the supplies following one of the approaches outlined above when at all possible.

| Sex and Weight of Patient | Needle Gauge | Needle Length | Injection Site* |
|--------------------------------------|--------------|----------------|-----------------------|
| Female or male fewer than 130 pounds | 22-25 | 5/8** - 1 inch | Deltoid muscle of arm |
| Female or male 130-152 pounds | 22-25 | 1 inch | Deltoid muscle of arm |
| Female 152-200 pounds | 22-25 | 1-1½ inch | Deltoid muscle of arm |
| Male 153-260 pounds | 22-25 | 1-1½ inch | Deltoid muscle of arm |
| Female 200+ pounds | 22-25 | 1½ inch | Deltoid muscle of arm |
| Male 260+ pounds | 22-25 | 1½ inch | Deltoid muscle of arm |

*Alternatively, the anterolateral thigh also can be used.

**Some experts recommend a 5/8-inch needle for men and women who weigh less than 130 pounds. If used, skin must be stretched tightly (do not bunch subcutaneous tissue).

Please visit coronavirus.ohio.gov/vaccine for resources for consumers and providers.

Direct your questions to the ODH Provider Call Center at 1-844-9-ODH-VAX (1-844-963-4829) for assistance.