### Pfizer

**Primary Series**

<table>
<thead>
<tr>
<th>Age for use (years)</th>
<th>16+ (Approved)*</th>
<th>16+ (Approved)*</th>
<th>12+ (EUA)</th>
<th>18+ (EUA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose 1</td>
<td>30 mcg/0.3 mL</td>
<td>30 mcg/0.3 mL</td>
<td>30 mcg/0.3 mL</td>
<td>30 mcg/0.3 mL</td>
</tr>
<tr>
<td>Interval</td>
<td>NA</td>
<td>21 days</td>
<td>At least 28 days since last dose</td>
<td>At least six months after completion of primary series</td>
</tr>
<tr>
<td>Interchangeability</td>
<td>-</td>
<td>No</td>
<td>Yes w/ Moderna 100 mcg/0.5 mL</td>
<td>Yes w/ Moderna 50 mcg/0.25 mL OR Janssen (J&amp;J) 5x10^10 VP/0.5 mL</td>
</tr>
</tbody>
</table>

**Contraindications**

- Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to component of an mRNA COVID-19 vaccine (*Appendix 1*)
- Immediate (within 4 hours of exposure) allergic reaction of any severity to a previous dose or known (diagnosed) allergy to a component of the vaccine (*Appendix 1*)

**Eligibility Criteria**

- No restrictions other than age and contraindications

**Dose**

- 30 mcg/0.3 mL
- 30 mcg/0.3 mL
- 30 mcg/0.3 mL
- 30 mcg/0.3 mL
- 30 mcg/0.3 mL

**Interval**

- NA
- 21 days
- At least 28 days since last dose
- At least six months after completion of primary series

**Interchangeability**

- No
- Yes w/ Moderna 100 mcg/0.5 mL

*The Pfizer-BioNTech COVID-19 vaccine (Comirnaty) is FDA approved for patients 16 years and older as part of primary series (2 doses separated by 21 days).*
<table>
<thead>
<tr>
<th>Pfizer 5-11</th>
<th>Primary Series Dose 1</th>
<th>Primary Series Dose 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age for use (years)</td>
<td>5-11 (EUA)</td>
<td>5-11 (EUA)</td>
</tr>
<tr>
<td>Contra-indications</td>
<td>• Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to component of an mRNA COVID-19 vaccine (<em>Appendix 1</em>)&lt;br&gt;• Immediate (within 4 hours of exposure) allergic reaction of any severity to a previous dose or known (diagnosed) allergy to a component of the vaccine (<em>Appendix 1</em>)</td>
<td></td>
</tr>
<tr>
<td>Eligibility Criteria</td>
<td>No restrictions other than age and contra-indications</td>
<td>No restrictions other than age and contra-indications</td>
</tr>
<tr>
<td>Dose</td>
<td>10 mcg/0.2 mL</td>
<td>10 mcg/0.2 mL</td>
</tr>
<tr>
<td>Interval</td>
<td>NA</td>
<td>21 days</td>
</tr>
<tr>
<td>Interchangeability</td>
<td>-</td>
<td>No</td>
</tr>
<tr>
<td>Moderna</td>
<td>Primary Series Dose 1</td>
<td>Primary Series Dose 2</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Age for use (years)</td>
<td>18+ (EUA)</td>
<td>18+ (EUA)</td>
</tr>
</tbody>
</table>
| Contraindications | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to component of an mRNA COVID-19 vaccine (Appendix 1)  
• Immediate (within 4 hours of exposure) allergic reaction of any severity to a previous dose or known (diagnosed) allergy to a component of the vaccine (Appendix 1) | | | |
| Eligibility Criteria | No restrictions other than age and contraindications | No restrictions other than age and contraindications | Immunocompromised only (Appendix 2) | |
| Dose | 100 mcg/0.5 mL | 100 mcg/0.5 mL | 100 mcg/0.5 mL | 50 mcg/0.25 mL |
| Interval | NA | 28 Days | At least 28 days since last dose | At least six months after completion of primary series |
| Interchangeability | - | No | Yes w/ Pfizer 30 mcg/0.3 mL OR Janssen (J&J) $5 \times 10^{10}$ VP/0.5 mL | |

- All age 65+ **should** receive booster  
- All age 18+ residents in long-term care settings **should** receive booster (Appendix 3)  
- Age 50-64 **w/ underlying medical condition** (Appendix 4) **should** receive booster  
- Age 18-49 **w/ underlying medical condition** (Appendix 4) **may** receive booster  
- Age 18-64 **w/ increased risk for COVID-19 exposure and transmission due to occupational or institutional setting** (Appendix 5) **may** receive booster
<table>
<thead>
<tr>
<th>Janssen (J&amp;J)</th>
<th>Primary Dose (Single Dose)</th>
<th>Additional Dose</th>
<th>Booster Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age for use (years)</td>
<td>18+ (EUA)</td>
<td>NEITHER APPROVED NOR AUTHORIZED</td>
<td>18+ (EUA)</td>
</tr>
</tbody>
</table>
| Contraindications | • Severe allergic reaction (e.g., anaphylaxis) to component of the Janssen (J&J) vaccine (*Appendix 1*)  
• Immediate (within 4 hours of exposure) allergic reaction of any severity to a known (diagnosed) allergy to a component of the vaccine (*Appendix 1*) | NA | • Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to component of the Janssen (J&J) vaccine (*Appendix 1*)  
• Immediate (within 4 hours of exposure) allergic reaction of any severity to a previous dose or known (diagnosed) allergy to a component of the vaccine (*Appendix 1*) |
| Eligibility Criteria | No restrictions other than age and contra-indications | NA | No restrictions other than age and contra-indications |
| Dose | $5 \times 10^{10}$ VP/0.5 mL | NA | $5 \times 10^{10}$ VP/0.5 mL |
| Interval | NA | NA | At least 2 months after completion of primary (first) dose |
| Interchangeability | - | NA | Yes w/ Pfizer 30 mcg/0.3 mL  
OR  
Moderna 50 mcg/0.25 mL |
APPENDIX 1: Vaccine components

• **Pfizer Age 12+**
  - Do not administer Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine
    - Each dose of the Pfizer-BioNTech COVID-19 Vaccine also includes the following ingredients: lipids (0.43 mg (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate), 0.05 mg 2[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide, 0.09 mg 1,2-distearoyl-sn-glycero-3-phosphocholine, and 0.2 mg cholesterol), 0.01 mg potassium chloride, 0.01 mg monobasic potassium phosphate, 0.36 mg sodium chloride, 0.07 mg dibasic sodium phosphate dihydrate, and 6 mg sucrose. The diluent (0.9% Sodium Chloride Injection, USP) contributes an additional 2.16 mg sodium chloride per dose.
    - The Pfizer-BioNTech COVID-19 Vaccine does not contain preservative.

• **Pfizer Age 5-11**
  - Do not administer Pfizer-BioNTech COVID-19 Vaccine to individuals with known history of a severe allergic reaction (e.g., anaphylaxis) to any component of the Pfizer-BioNTech COVID-19 Vaccine
    - Each 0.2 mL dose of the Pfizer-BioNTech COVID-19 Vaccine supplied in multiple dose vials with orange caps and labels with orange borders also includes the following ingredients: lipids (0.14 mg (4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate), 0.02 mg 2[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide, 0.03 mg 1,2-distearoyl-sn-glycero-3-phosphocholine, and 0.06 mg cholesterol), 10.3 mg sucrose, 0.02 mg tromethamine, and 0.13 mg tromethamine hydrochloride.
    - The Pfizer-BioNTech COVID-19 Vaccine does not contain preservative.

• **Moderna**
  - Do not administer the Moderna COVID-19 Vaccine to individuals with a known history of severe allergic reaction (e.g., anaphylaxis) to any component of the Moderna COVID-19 Vaccine
    - Each 0.5 mL dose of Moderna COVID-19 Vaccine contains 100 mcg of nucleoside-modified messenger RNA (mRNA) encoding the pre-fusion stabilized Spike glycoprotein (S) of SARS-CoV-2 virus. Each 0.5 mL dose of the Moderna COVID-19 Vaccine contains the following ingredients: a total lipid content of 1.93 mg (SM-102, polyethylene glycol [PEG] 2000 dimyristoyl glycerol [DMG], cholesterol, and 1,2-distearoyl-sn-glycero-3-phosphocholine [DSPC]), 0.31 mg tromethamine, 1.18 mg tromethamine hydrochloride, 0.043 mg acetic acid, 0.20 mg sodium acetate trihydrate, and 43.5 mg sucrose. Each 0.25 mL dose of Moderna COVID-19 Vaccine contains half of these ingredients.
    - Moderna COVID-19 Vaccine does not contain a preservative.

• **Janssen (J&J)**
  - Do not administer the Janssen COVID-19 Vaccine to individuals with a known history of severe allergic reaction (e.g., anaphylaxis) to any component of the Janssen COVID-19 Vaccine
    - Each 0.5 mL dose of Janssen COVID-19 Vaccine is formulated to contain 5×10^10 inactive ingredients: citric acid monohydrate (0.14 mg), trisodium citrate dihydrate (2.02 mg), ethanol (2.04 mg), 2-hydroxypropyl-β-cyclodextrin (HBCD) (25.50 mg), polysorbate-80 (0.16 mg), sodium chloride (2.19 mg). Each dose may also contain residual amounts of host cell proteins (≤0.15 mcg) and/or host cell DNA (≤3 ng). virus particles (VP)
    - Janssen COVID-19 Vaccine does not contain a preservative.
APPENDIX 2: Immunocompromised conditions that qualify for an additional/third dose

- Active blood cancer (for example, leukemia, lymphoma, myeloma, myelodysplastic syndrome) even if not on treatment for the cancer
- Receiving treatment for a solid tumor with chemotherapy, hormonal therapy, immunotherapy, surgery and/or radiation therapy (currently or within one year of initial mRNA COVID-19 vaccine series)
- Received a stem cell transplant within the last two years or requiring immune-suppressing medication
- Received a solid organ transplant (such as a kidney or liver transplant) and are taking immune-suppressing medication
- Moderate or severe primary immunodeficiency (such as DiGeorge or Wiskott-Aldrich syndrome)
- Advanced or untreated HIV disease
- Taking (or were taking at the time of initial mRNA COVID-19 vaccine series) high-dose corticosteroids (equal to at least 20 mg of prednisone daily) or other medications that suppress the immune system:
  - 6-mercaptopurine (Purinethol, Purinx)
  - Abatacept (Orencia)
  - Adalimumab (Humira)
  - Alemtuzumab (Lemtrada, Campath)
  - Anakinra (Kineret)
  - Azathioprine (Imuran, Azasan)
  - Baricitinib (Olumiant)
  - Belatacept (Nulojix)
  - Benlimumab (Benlysta)
  - Certolizumab (Cimzia)
  - Cladribine (Mavenclad)
  - Cyclosporine (Gengraf, Neoral, Sandimmune)
  - Etanercept (Enbrel, Erelzi)
  - Fingolimod (Gilenya)
  - Golimumab (Simponi)
  - Infliximab (Remicade, Inflectra, Renflexis, Avsola)
  - Methotrexate (Otrexup, Rasuvo, Rheumatrex, Trexall)
  - Mycophenolate mofetil (Cellcept, Myfortic)
  - Obinutuzumab (Gazyva)
  - Ocrelizumab (Ocrevus)
  - Ofatumumab (Kesimpta)
  - Ozanimod (Zeposia)
  - Rituximab (Rituxan, Truxima, Ruxience, Riabni)
  - Siponimod (Mayzent)
  - Sirolimus (Rapamune)
  - Tacrolimus (Prograf, Envarsus XR)
  - Tofacitinib (Xeljanz, Xeljanz XR)
  - Upadacitinib (Rinvoq)
Appendix 3: Definition of long-term care settings

“Long-term care settings” include any location where older adults, people with disabilities or chronic health conditions, or people otherwise needing assistance with activities of daily living receive services or supports. These can include both medical care and non-medical care.

Examples of long-term care settings include, but are not limited to:

- Skilled nursing and nursing facilities (also known as nursing homes)
- Intermediate care facilities for individuals with intellectual disabilities (ICFs-IID)
- Inpatient psychiatric settings, including psychiatric residential treatment facilities (PRTFs)
- Inpatient substance use disorder facilities and residential settings for people with substance use disorders
- Assisted living settings for older adults and people with disabilities, including assisted living facilities, independent living facilities, residential care and continuing care retirement communities, personal care homes, and board and care homes
- Senior housing, including Section 202 and other HUD-assisted housing that primarily serves older adults
- Housing for people with disabilities, including Section 811 HUD-assisted housing, Housing Opportunities for People living With AIDS (HOPWA), and other HUD-assisted housing that primarily serves people with disabilities
- Residential settings for people with disabilities and older adults, including group homes, shared living, adult foster care, and transitional housing
- Congregate day programs, including adult day programs, PACE programs, day habilitation programs, and other community-based day service programs
- Senior center programs and congregate nutrition programs

Appendix 4: Underlying Medical Conditions that qualify for booster

- Chronic kidney disease
- Chronic lung diseases (for example, COPD, moderate to severe asthma, interstitial lung disease, pulmonary hypertension, cystic fibrosis)
- Dementia and other neurologic conditions
- Diabetes (type 1 or 2)
- Down syndrome
- Heart conditions (for example, heart failure, coronary artery disease, cardiomyopathy)
- Hypertension
- HIV infection
- Immunocompromised state (unless you have already received an additional/third dose as a result of your immunocompromised state)
- Liver disease
- Overweight and obesity (BMI >25 kg/m²)
- Pregnancy and recent pregnancy
- Sickle cell disease
- Smoking, current or former
- Stroke or cerebrovascular disease
- Substance use disorders

Appendix 5: Occupational or institutional settings that increase risk for COVID-19 exposure and transmission

Below are examples of occupations where workers might be at increased risk of exposure to the virus that causes COVID-19. This list does not include all potential occupations where a worker could have an increased risk for exposure. Individuals should talk with their healthcare provider about their personal risks.

Factors that may affect a worker’s risk for exposure to the virus that causes COVID-19 include the levels of:

- Community transmission of the virus that causes COVID-19,
- COVID-19 vaccination,
- Adherence to other prevention measures (e.g., wearing masks), and
- Unavoidable frequent interactions with possibly unvaccinated people from outside their household

Examples of workers who may get booster shots:
- First responders (e.g., healthcare workers, firefighters, police, congregate care staff)
- Education staff (e.g., teachers, support staff, daycare workers)
- Food and agriculture workers
- Manufacturing workers
- Corrections workers
- U.S. Postal Service workers
- Public transit workers
- Grocery store workers

Other groups who may get booster shots because they work or reside in settings that may increase exposure to COVID-19:

- Adults aged 18–64 years who work or reside in certain settings (e.g., health care, schools, correctional facilities, homeless shelters) may be at increased risk of being exposed to COVID-19, which could be spreading where they work or reside
  - Since that risk can vary across settings and based on how much COVID-19 is spreading in a community, people aged 18–64 years who are at increased risk for COVID-19 exposure and transmission because of occupational or institutional setting may get a booster shot after considering their individual risks and benefits