Based on guidance from the FDA and CDC, MSDH is providing updated recommendations for the use of COVID-19 vaccines and highlighting several priorities, including recommendations for booster doses in defined groups. **This public health guidance is interim and will be updated as additional guidance from CDC is provided.**

### General Recommendations for COVID-19 Vaccine Primary Series

COVID-19 vaccine is currently recommended for all individuals aged ≥12 years of age as a primary series:

- **Pfizer COVID-19 mRNA vaccine** is a two dose primary vaccine series, separated by at least 3 weeks between doses, for all individuals 12 years of age and older under FDA Emergency Use Authorization (Pfizer COVID-19 vaccine has received full FDA Approval for ages 16 years of age and older).
- **Moderna COVID-19 mRNA vaccine** is a two dose primary vaccine series, separated by at least 4 weeks between doses, for all individuals 18 years of age and older.
- **Johnson and Johnson/Janssen viral vector COVID-19 vaccine** is a one dose primary vaccine series for all individuals 18 years of age and older.

Individuals are considered fully vaccinated ≥2 weeks after the second dose in a two-dose series of either mRNA vaccine (Pfizer or Moderna) or ≥2 weeks after one dose of Johnson and Johnson vaccine.

**Priority:** All individuals 12 years of age and older are recommended by MSDH to be fully vaccinated against COVID-19 with a primary dose series. Full vaccination with a primary COVID-19 vaccine series is especially important for all women who are pregnant, or women planning to become pregnant, individuals 65 years of age and older, residents of long-term care facilities, healthcare workers and anyone with chronic underlying medical conditions.
Additional or Third Dose in the Primary Series for Immunocompromised Individuals (Limited to Pfizer or Moderna mRNA Vaccine Recipients)

For individuals with moderate to severe immune compromise, an additional or third dose of mRNA COVID-19 (Pfizer or Moderna) vaccine is recommended after an initial 2-dose primary mRNA COVID-19 vaccine series:

- Only individuals who received Pfizer or Moderna as the primary 2-dose series are currently eligible for the additional or third dose in the series due to an immunocompromising condition.
- The additional dose of an mRNA COVID-19 vaccine should be administered at least 28 days after completion of the initial 2-dose mRNA COVID-19 vaccine series.
- Use the same vaccine product, when feasible: People who are eligible should receive a third dose of the same vaccine used for the primary two-dose series.

MSDH recommends an additional or third dose for the following individuals:

- Receiving cancer treatment for tumors or cancers of the blood.
- Received an organ transplant and are taking medicine to suppress the immune system.
- Received a stem cell transplant within the last 2 years or are taking medicine to suppress the immune system.
- Moderate or severe primary immunodeficiency (such as DiGeorge syndrome, Wiskott-Aldrich syndrome).
- Advanced or untreated HIV infection
- Active treatment with high-dose corticosteroids or other drugs that may suppress your immune response.
- Any other medical condition which, in the provider’s opinion, limits the immune response to the mRNA COVID-19 vaccine primary two-dose series.

For full Updated Guidance for an Additional Dose or Third Dose of mRNA COVID-19 Vaccine for Immunocompromised Individuals, please see previous Health Alert Message dated August 16, 2021, at 15390.pdf (ms.gov)

Booster Dose (Limited to Pfizer mRNA COVID-19 Vaccine Recipients)

A single booster dose of Pfizer COVID-19 vaccine is recommended for certain populations at least 6 months after completion of the primary two-dose series of Pfizer. The booster dose is currently limited to only those individuals who received Pfizer as the primary two-dose series.
MSDH recommends:

- **As a priority**, individuals aged **65 years and older**, and residents in **long-term care facilities (LTCF)** should receive Pfizer COVID-19 vaccine at least 6 months after their Pfizer primary series.
- **As a priority**, individuals aged 50–64 years with **underlying medical conditions** (see below) should receive a booster shot of Pfizer COVID-19 vaccine at least 6 months after their Pfizer primary series.
- Individuals aged 18–49 with underlying medical conditions (see below) may also receive a booster shot of Pfizer COVID-19 vaccine at least 6 months after their Pfizer primary series.
- Individuals aged 18–64 years who are at increased risk for COVID-19 exposure and transmission because of occupational or institutional setting (see below) may also receive a booster shot of Pfizer COVID-19 vaccine at least 6 months after their Pfizer primary series.

**Underlying Medical Conditions** to Consider for a Single Booster Dose of Pfizer COVID-19 Vaccine (priority booster vaccination is for individuals ≥65 years, LTCF residents, and individuals aged 50–64 years with underlying medical conditions):

- Chronic kidney disease,
- Chronic lung diseases (COPD, asthma, etc.),
- Dementia or other neurological conditions
- Diabetes (type 1 or 2),
- Down syndrome,
- Heart conditions (such as heart failure, coronary artery disease, or cardiomyopathies),
- Hypertension
- Liver Disease
- Overweight (defined as a body mass index (BMI) > 25 kg/m² but < 30 kg/m²), obesity (BMI ≥30 kg/m² but < 40 kg/m²), or severe obesity (BMI of ≥40 kg/m²),
- Pregnancy,
- Sickle cell disease or thalassemia,
- Smoking (current or former),
- Stroke,
- Substance abuse disorders,
- Other medical conditions determined by the medical provider.

**Occupations and Settings** to Consider for a Single Booster Dose of Pfizer COVID-19 Vaccine (priority booster vaccination is for individuals ≥65 years, LTCF residents, and individuals aged 50–64 years with underlying medical conditions):

- All healthcare personnel.
- All teachers/staff/employees in K–12, preschool, and childcare settings.
- All first responders (including law enforcement and correctional personnel, public safety, fire services and emergency management officials).
• All employees in congregate settings (e.g., homeless shelters, domestic violence shelters, etc).

What is the difference between an “additional dose (third dose)” and a “booster dose of COVID-19 vaccine?”

Additional or Third Dose in the Primary Series

Individuals with moderately to severely compromised immune systems are especially vulnerable to COVID-19 and may not mount the same immune response to the 2-dose vaccine primary series compared to people who are not immunocompromised. Therefore, an additional dose to the two-dose mRNA vaccine series is recommended at least 4 weeks after completion of the primary series.

Booster Dose

A COVID-19 booster dose is given to provide additional immunity after the initial immune response to the primary two-dose series of vaccine has waned over time. This will help maintain (or boost) immunity for longer time periods and provide additional protection. The COVID-19 booster dose is only recommended for certain populations who are at least 6 months after completion of the two-dose Pfizer COVID-19 vaccine series.
**Alerting Message Specification Settings**

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<thead>
<tr>
<th>Originating Agency:</th>
<th>Mississippi State Department of Health</th>
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<tr>
<td>Alerting Program:</td>
<td>MS Health Alert Network (MS HAN)</td>
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<td>Message Identifier:</td>
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<td>Health Alert</td>
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<td>Message Expiration:</td>
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<td>Urgency:</td>
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<tr>
<td>Delivery Time:</td>
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</tr>
</tbody>
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**Definition of Alerting Vocabulary and Message Specification Settings**

<table>
<thead>
<tr>
<th>Originating Agency:</th>
<th>A unique identifier for the agency originating the alert.</th>
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<tbody>
<tr>
<td>Alerting Program:</td>
<td>The program sending the alert or engaging in alerts and communications using PHIN Communication and Alerting (PCA) as a vehicle for their delivery.</td>
</tr>
<tr>
<td>Message Identifier:</td>
<td>A unique alert identifier that is generated upon alert activation (MSHAN-yyymmdd-hhm-TTT (ALT=Health Alert, ADV=Health Advisory, UPD=Health Update, MSG/INFO=Message/Info Service)).</td>
</tr>
<tr>
<td>Program (HAN) Type:</td>
<td>Categories of Health Alert Messages.</td>
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<tr>
<td>Health Alert:</td>
<td>Conveys the highest level of importance; warrants immediate action or attention.</td>
</tr>
<tr>
<td>Health Advisory:</td>
<td>Provides important information for a specific incident or situation; may not require immediate action.</td>
</tr>
<tr>
<td>Health Update:</td>
<td>Provides updated information regarding an incident or situation; unlikely to require immediate action.</td>
</tr>
<tr>
<td>Health Info Service:</td>
<td>Provides Message / Notification of general public health information; unlikely to require immediate action.</td>
</tr>
<tr>
<td>Status (Type):</td>
<td>Communication or alert refers to a live event</td>
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<tr>
<td>Actual:</td>
<td>Designated recipients must respond to the communication or alert</td>
</tr>
<tr>
<td>Exercise:</td>
<td>Communication or alert is related to a technical, system test and should be disregarded</td>
</tr>
<tr>
<td>Test:</td>
<td>Indicates an original Alert</td>
</tr>
<tr>
<td>Update:</td>
<td>Indicates prior alert has been Updated and/or superseded</td>
</tr>
<tr>
<td>Cancel:</td>
<td>Indicates prior alert has been cancelled</td>
</tr>
<tr>
<td>Error:</td>
<td>Indicates prior alert has been retracted</td>
</tr>
</tbody>
</table>
Reference: For a communication or alert with a Message Type of “Update” or “Cancel”, this attribute contains the unique Message Identifier of the original communication or alert being updated or cancelled. “n/a” = Not Applicable.

Severity:
- Extreme: Extraordinary threat to life or property
- Severe: Significant threat to life or property
- Moderate: Possible threat to life or property
- Minor: Minimal threat to life or property
- Unknown: Unknown threat to life or property

Acknowledgement: Indicates whether an acknowledgement on the part of the recipient is required to confirm that the alert was received, and the timeframe in which a response is required (Yes or No).

Sensitive:
- Sensitive: Indicates the alert contains sensitive content
- Not Sensitive: Indicates non-sensitive content

Message Expiration: Undetermined.

Urgency: Undetermined. Responsive action should be taken immediately.

Delivery Time: Indicates the timeframe for delivery of the alert (15, 60, 1440, 4320 minutes (.25, 1, 24, 72 hours)).