Maternal Immunization

Naima T. Joseph, MD, MPH, FACOG I May 11, 2023
National Adult and Influenza Immunization Summit

DISCLOSURES

<table>
<thead>
<tr>
<th>External Industry Relationships</th>
<th>Company Name</th>
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</thead>
<tbody>
<tr>
<td>Equity, stock, or options in biomedical industry companies or publishers</td>
<td>None</td>
</tr>
<tr>
<td>Board or Directors or Officer</td>
<td>SMFM Board of Directors, Associate Member</td>
</tr>
<tr>
<td></td>
<td>SMFM COVID -19 Task Force</td>
</tr>
<tr>
<td>Royalties from external industry</td>
<td>UpToDate</td>
</tr>
<tr>
<td>Industry Funds</td>
<td>None</td>
</tr>
<tr>
<td>Other</td>
<td>None</td>
</tr>
</tbody>
</table>
RATIONAL FOR MATERNAL IMMUNIZATION

Increased risk of infection-related morbidity and mortality

Gap immunity during early infancy

Dual protection through immunization of birthing person

Promotion of life-long maternal and infant health and well-being

VACCINES CURRENTLY RECOMMENDED DURING PREGNANCY

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Risk-Benefit</th>
<th>Not Recommended</th>
<th>Contraindicated</th>
<th>No Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDaP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rabies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monkeypox/ smallpox – JYNNEOS*</td>
<td>Typhoid#</td>
<td></td>
<td>BCG Monkeypox/ smallpox - ACAM2000</td>
<td>Japanese Encephalitis</td>
</tr>
<tr>
<td>Anthrax</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellow Fever</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Moving towards recommended; *only for post exposure prophylaxis; #Use vi polysaccharide instead
2023 National Adult and Influenza Immunization Summit - 5/11/23

**IMMUNIZATION BELOW TARGETS**

<table>
<thead>
<tr>
<th></th>
<th>COVID-19</th>
<th>Influenza</th>
<th>TDaP*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnant</td>
<td>70.4</td>
<td>48.6</td>
<td>79.2</td>
</tr>
<tr>
<td>Nonpregnant</td>
<td>79.1</td>
<td>48.3</td>
<td>70.5</td>
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Data from [https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/index.html](https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/index.html)

TDaP Coverage from 2019 BRFSS Survey Data. CDC

**DISPARITIES IN IMMUNIZATION COVERAGE**

<table>
<thead>
<tr>
<th></th>
<th>COVID-19</th>
<th>Influenza</th>
<th>TDaP</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH Black</td>
<td>57.4</td>
<td>41.6</td>
<td>66.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>70.5</td>
<td>59.4</td>
<td>79.9</td>
</tr>
<tr>
<td>White</td>
<td>67.6</td>
<td>65.5</td>
<td>80.4</td>
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</tbody>
</table>

Data from [https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/index.html](https://www.cdc.gov/vaccines/imz-managers/coverage/adultvaxview/index.html)

TDaP and Influenza Coverage from 2020
WHAT THE PANDEMIC HAS TAUGHT US ABOUT MATERNAL IMMUNIZATION

• Missed opportunities
  • Need to capitalize on prenatal care to enhance long-term maternal-infant wellness

• Science communication
  • Need to improve confidence regarding maternal immunization among patients and providers

• Equitable vaccination strategies
  • Need to harness innovative, community-based platforms for vaccine counseling and delivery

BARRIES TO VACCINE PROVISION IN PRENATAL CARE SETTINGS

Patient and Provider Perspectives
BARRIES TO VACCINE PROVISION IN PRENATAL CARE SETTINGS
Patient and Provider Perspectives

- Rapidly evolving science and messaging regarding vaccination
- Varying sources of medical information
- Community representation
- (Initial) Lack of pregnancy-specific data

Landscape  Clinician  Practice Setting  Patient

BARRIES TO VACCINE PROVISION IN PRENATAL CARE SETTINGS
Patient and Provider Perspectives

- Lack of skills navigating vaccine hesitancy
- Lack of confidence surrounding vaccine recommendations
- Lack of time to provide counseling
- Reimbursement

Landscape  Clinician  Practice Setting  Patient
BARRIES TO VACCINE PROVISION IN PRENATAL CARE SETTINGS
Patient and Provider Perspectives

- Vaccine availability differs within practice sites
- Siloed and uncoordinated data systems
- Different messaging within/across practices

• Safety concerns
• Perceptions of risk
• Vaccine beliefs
• More pressing health concerns
COUNSELING PREGNANT PATIENTS REGARDING VACCINATION

1. **Risk of exposure** to the disease
2. Whether an infection poses special **risk to the mother**
3. Whether an infection poses a special **risk to the fetus**
4. Availability of a **safe and effective vaccine**
SHARING PATIENT STORIES

“I navigate in the world now with much more confidence knowing that my baby and I are protected. If I had to do it all over again, I would’ve gotten vaccinated earlier.”

—Kntrice Anadumaka

IT IS POSSIBLE TO CHANGE ATTITUDES

• Related to beliefs
  • Safety
  • Effectiveness

• Related to relationships
  • Provider recommendations

Padamsee TJ, Bond RM, Dixon GN et al. JAMA Network Open 2022
https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2785246
ACOG PRACTICE ADVISORY

Comprehensive clinical guidance regarding COVID-19 Vaccination

- FDA & ACIP recommendations
- Efficacy & safety information
- ACOG recommendations
CONVERSATION GUIDE FOR CLINICIANS

Highlights the main conversation points for clinicians from ACOG’s Practice Advisory to help discuss COVID-19 vaccines with pregnant individuals.

- Key recommendations
- Safety messages
- Efficacy messages

COVID-19 Vaccines and Pregnancy: Key Recommendations and Messaging for Clinicians

KEY RECOMMENDATIONS

- The American College of Obstetricians and Gynecologists (ACOG) recommends that pregnant individuals be vaccinated against COVID-19 to protect the potential for severe illness and death during pregnancy, completion of the initial COVID-19 vaccination series is crucial for this protection.
- Vaccination may occur in any trimester; emphasis should be on vaccination at the earliest possible time to minimize maternal and perinatal morbidity and mortality.
- For patients who do not receive the vaccine, the discussion should be advanced into a patient’s medical record. During subsequent office visits, Obstetrician-Gynecologists should address ongoing questions and concerns related to vaccination.
- COVID-19 vaccines may be administered simultaneously with other vaccines, including within 14 days of receipt of another vaccine. This includes concomitant vaccine administration during pregnancy, such as the influenza and tetanus vaccine.
- Individuals aged 16 or 17 years of age or older who are COVID-19 are eligible for a COVID-19 vaccine. ACOG recommends that pregnant individuals, including pregnant women and their partners, receive a dose of COVID-19 vaccine at least 2 weeks after the completion of their initial COVID-19 vaccine series.
- Pregnant women and pregnant individuals should be encouraged to sign up for the U.S. National Pregnancy and Incidence of COVID-19 (PINC) vaccine confidence training.

KEY MESSAGES

The following messages are intended to help guide conversations with pregnant patients:

Risk Associated with COVID-19 Infections During Pregnancy

- COVID-19 infection during pregnancy is associated with increased rates of maternal severe illness, admission to an intensive care unit, mechanical ventilation, and death.
- There is an increased risk of complications from COVID-19 in pregnant patients with underlying health conditions (e.g., diabetes, obesity, increasing age, and chronic obstructive disease).
- There is an increased risk of maternal mortality, and there may be an increased risk of stillbirth.
- There is an increased risk of abortion and stillbirth for some racial and ethnic populations.

Safety of COVID-19 Vaccines

- None of the COVID-19 vaccines available for use under emergency use authorization or US Food and Drug Administration (FDA) license are known to interfere with fertility or spontaneous abortion.
- There is no evidence of adverse maternal or fetal effects from vaccinating pregnant individuals with the COVID-19 vaccine, and a

INFORM TO EMPOWER: ACOG COVID-19 VACCINE CONFIDENCE TRAINING

Introducing the ACOG Immunization Team’s newest training initiative! Inform to Empower: Building COVID-19 Vaccine Confidence One Conversation at a Time is a series of six training videos consisting of tools and resources to assist clinicians in promoting vaccine confidence among pregnant people.

Each module includes a toolkit with resources for patients, including printable handouts.

Module 1: Introduction to ACOG’s COVID-19 Vaccine Confidence Training
Module 2: COVID-19 Landscape: Data and Recommendations
Module 3: Confident Conversations: Exploring Evidence-Based Strategies
Module 4: Confident Conversations: Leading Effective Vaccine Conversations
Module 5: Confident Conversations: Addressing COVID-19 Vaccine Misinformation
Module 6: Confident Conversations: Leading by Example
LABOR OF LOVE: STORIES OF VACCINES, Varients, and Parenting During COVID

Check out ACOG’s new podcast, Labor of Love: Stories of Vaccines, Variants, and Parenting during COVID. This season of Labor of Love is a five-part series where each week, Veronica Pimentel, MD, MS, FACOG, speaks with women dealing with everything that accompanies motherhood and pregnancy in the time of COVID-19. Dr. Pimentel also speaks with medical experts in the fields of maternal health, fertility, and mental well-being who provide evidence-based information and recommendations on how best to navigate pregnancy and motherhood during COVID-19.

Check out the trailer for Labor of Love and find more information about the podcast.

All episodes are now available on your favorite podcast streaming outlet! Listen and subscribe today!

COVID-19 VACCINES: TOOLS FOR YOUR PRACTICE AND YOUR PATIENTS

COVID-19 Vaccines: Tools for Your Practice and Your Patients is a new tool kit from ACOG compiling all of our COVID-19 resources in a 1-stop shop.

It also includes several new resources including a template letter to patients about COVID-19 vaccines, and a “how to guide” for ACOG members outlining the process for becoming a COVID-19 vaccinator.
PATIENT EDUCATION RESOURCES

COVID-19 resources on ACOG’s Patient Education Portal include:

- **Expert columns**
- **Frequently Asked Questions**

CODING FOR COVID-19 IMMUNIZATIONS

Coding for COVID-19 Immunizations

Practice management resource outlining coding specifics for COVID-19 vaccines
ACOG RESOURCES

- Patient and provider testimonials: https://www.acog.org/programs/immunization-for-women/activities-initiatives/building-covid-19-vaccine-confidence/testimonials

- COVID-19 vaccine confidence training has a module on misinformation (module 5): https://www.acog.org/covid-19/vaccine-confidence-champion-network/training

- Patient-facing videos and resources: https://www.acog.org/programs/immunization-for-women/physician-tools/patient-education-videos-routine-vaccinations-during-pregnancy