Updates and Alerts

- **Immunizing during COVID-19**
  Please see the Special Section on page 7 for information from AAP and Centers for Disease Control and Prevention (CDC) about maintaining immunizations during COVID-19.

- **State of New Jersey updates its mandate for meningococcal vaccines in colleges and universities**
  The New Jersey legislature updated its mandate for college students to be immunized against meningococcal disease. The law, passed on January 13, 2020, requires all incoming students attending New Jersey colleges or universities to be vaccinated with meningococcal vaccines according to the CDC Advisory Committee on Immunization Practices Recommended Immunization Schedule. Previously, only students living in dormitories and attending four-year institutions were required to receive meningococcal ACWY (MenACWY) vaccine.

The New Jersey Department of Health developed and shared guidance describing the requirement for MenACWY vaccine, and the recommendation that college-bound students receive education on risks and benefits of meningococcal B (MenB) vaccine and that MenB vaccine be made available to those students who choose to be vaccinated. The updated mandate takes effect on June 15, 2020.

- **Newsletter Feedback**
  The AAP Childhood Immunization Support Program would like your feedback on this quarterly Newsletter. Please consider taking 5 minutes to tell us what you like and what you would improve. Access our brief survey at: [https://www.surveymonkey.com/r/J5LMWZ5](https://www.surveymonkey.com/r/J5LMWZ5).

- **CDC updates “General Best Practice Guidelines for Immunization”**
  The CDC recently updated its General Best Practice Guidelines for Immunization. The update includes several changes that are described on the List of Errata/Updates web page, last updated on February 21, 2020.

Updates listed include:

- **Timing and Spacing of Immunobiologics**
  - PAGE 23
    The recommendation was changed to allow providers to administer a dose of live, injectable vaccine even if the interval after receipt of an antibody-containing blood product is not complete.
  - PAGE 39 (Table 3-5 Footnotes)
    The specific source material for understanding antibody quantities in antibody products is now listed. Also listed is the process for determining how to calculate the interval between antibody product and live, injectable vaccine, based on the quantity of antibody in the product.

- **Contraindications and Precautions (PAGE 55, Table 4-1)**
  A footnote is placed after HPV vaccine to clarify that HPV vaccine is not recommended during pregnancy.

- **Storage and Handling of Immunobiologics (PAGE 115)**
  For response to out-of-range temperature readings, if a non-live vaccine is administered and then found to have been stored at a deviated temperature, the dose should be repeated and does not need to wait an interval from the invalid dose, except for administration of Shingrix, which does need to wait 4 weeks after the invalid dose.
Events

- **National Infant Immunization Week**
  April 25 – May 2, 2020
  NIIW highlights the importance of protecting infants from vaccine-preventable diseases and celebrates the achievements of immunization programs in promoting healthy communities throughout the United States. View AAP Resources and the CDC Toolkit.

- **National Immunization Conference (NIC) - CANCELLED**
  As COVID-19 response activities intensify nationwide, the CDC has cancelled the National Immunization Conference (NIC), scheduled for May 19-21, 2020 in Atlanta, GA.

- **Advisory Committee on Immunization Practices (ACIP)**
  June 24-25, 2020
  Atlanta, GA
  The ACIP holds three meetings each year at the CDC to review scientific data and vote on vaccine recommendations. Meetings are available online via live webcast. More information on ACIP meetings is available here.

Resources

- **Immunization Action Coalition (IAC) offers laminated 2020 Immunization Schedules.**
  Ideal for use in a clinical setting where vaccines are administered and discussed, order the laminated [2020 U.S. child/adolescent immunization schedule](https://redbook.solutions.aap.org/ss/outbreaks.aspx) or [2020 U.S. adult immunization schedule](https://redbook.solutions.aap.org/ss/outbreaks.aspx) from the IAC.

- **CDC Vaccine Price List Updated April 1, 2020**
  The [CDC Vaccine Price Lists](https://redbook.solutions.aap.org/ss/outbreaks.aspx) provide current prices under CDC vaccine contracts that are established for the purchase of vaccines by immunization programs that receive CDC immunization cooperative agreement funds (ie, state health departments, certain large city immunization projects, and certain current and former U.S. territories) and list private sector vaccine prices for general information. Private providers and private citizens cannot directly purchase vaccines through CDC contracts. Private sector prices are those reported by vaccine manufacturers annually to CDC. All questions regarding the private sector prices should be directed to the manufacturers.

Red Book Online

The Red Book Represents Official AAP Policy.

It is published every 3 years, but the AAP continually updates its policy to reflect current information.

**Red Book Online Outbreaks Section**

Find the latest infectious disease outbreaks information in the Red Book Online Outbreaks section for members and subscribers. Overseen by members of the AAP Committee on Infectious Diseases, the Outbreaks section is intended to provide pediatric health care professionals with a quick resource to get up to speed on current outbreaks and how they affect children, along with links to explore further.

The section mainly covers outbreaks of infections that have been identified in multiple U.S. states and that affect the pediatric population. Other outbreak types may be covered occasionally as situations warrant.

Bookmark the Outbreak section at [https://redbook.solutions.aap.org/ss/outbreaks.aspx](https://redbook.solutions.aap.org/ss/outbreaks.aspx) and keep an eye out for emails from Red Book Online alerting you to updates.

Share with CISP!

**Success Stories:** Have you implemented a system in your practice to improve efficiency or increase immunization rates? The Childhood Immunization Support Program would love to hear about and share your success story!

Visit [Share Your Success](https://redbook.solutions.aap.org/ss/outbreaks.aspx) for directions on how to share your story.

**Topics:** Got an idea about a topic you would like to see covered in the AAP Immunization Initiatives Newsletter? Contact us at: [immunize@aap.org](mailto:immunize@aap.org)
The National Immunization Survey-Child (NIS-Child) collects national, state, and local data annually regarding vaccination status among children aged 19 to 35 months in the United States. Although early childhood vaccination coverage is high, some children remain under-vaccinated. NIS-Child does not collect data regarding adherence to the Advisory Committee on Immunization Practices (ACIP)-recommended vaccination schedule, leaving gaps in important information regarding vaccination delays due to modified schedules. The purpose of this study was to examine survey participants’ up-to-date status, vaccination schedule adherence, and the influence of sociodemographic and logistical factors for a stronger understanding of vaccination trends for children aged 19 to 35 months.

Methods. This study utilized vaccination status information of children aged 19-35 months (n=14,893) that was verified by their healthcare providers and presented in the 2014 NIS-Child. Authors classified vaccination schedule type into the following three patterns. There was flexibility in the classification if children did not receive a vaccine on time due to lack of access.

- **Recommended** (following ACIP guidelines);
- **Alternate**, which included restrictive (defined as having more than six vaccination visits with ≤ 3 vaccines per visit to spread out vaccine administration) and selective (defined as not receiving >3 age-appropriate recommended vaccines at each visit and omitting at least one vaccine), or both restrictive and selective; and
- **Unknown or unclassifiable** (neither recommended nor alternate).

This study assessed vaccination coverage at five time points: birth (0-30 days), 2 months (38-92 days), 4 months (66-153 days), 6 months (94-214 days), and 12-91 months (361-580 days). Vaccination patterns were determined by the number of vaccines received per vaccination visit, which vaccine(s) were administered, and the child’s age in days at each visit. This study defined adhering to the recommended schedule as receiving the recommended vaccinations on at least four out of the 5 timepoints with no more than six total vaccination visits between birth and 19 months. An alternate schedule pattern was defined as receiving three or fewer vaccines at each visit – due to either omitting at least one vaccine, spreading vaccines out, or both – spanning at least six vaccination visits. Researchers coded schedule patterns as unclassifiable or unknown if the schedules had early and/or late vaccine administrations but did not follow a restrictive and/or selective pattern.

Participants were considered up-to-date if they had received the following vaccines when the NIS-Child was administered: ≥4 DTaP vaccine, ≥3 poliovirus vaccine, ≥1 dose measles-containing vaccine, ≥3 Hib vaccine, ≥3 hepatitis B vaccine, ≥1 varicella-containing vaccine, ≥4 PCV, ≥1 hepatitis A vaccine, and 2 rotavirus vaccines.

Continued on page 4
Featured Research Findings: Adherence to timely vaccinations in the United States

https://pediatrics.aappublications.org/content/145/3/e20190783 (login required)

AL Hargreaves, G Nowak, P Frew, AR Hinman, WA Orenstein, J Mendel, A Aikin, JA Nadeau, LA McNutt, AT Chamberlain, SB Omer, LA Randall & RA Bednarczyk

Researchers conducted bivariate and multivariate analyses to determine associations between vaccination schedule patterns, up-to-date status, and sociodemographic and logistical predictors, including child’s race and ethnicity; poverty status; number of vaccine providers; provider facility type; child’s birth order; maternal education level; census region; child’s receipt of benefits from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); child having moved across state lines since birth; insurance type; and the child’s ever-uninsured status.

Results. About 63% of survey participants adhered to the ACIP-recommended schedule, while 23% followed an alternate pattern, and 15% followed an unknown or unclassifiable pattern. About 58% of participants were up-to-date when the NIS-Child was administered. Predictors for an alternate pattern included moving across state lines, not being a firstborn, living in the Northwest, and being Hispanic black or multirace living below the poverty line. Predictors for unknown or unclassifiable patterns included receiving benefits from the Special Supplement Nutrition Program for WIC, living below poverty level, moving across state lines since birth, and receiving vaccinations from public facilities only. Children with alternate patterns were 4.2 times more likely to not be up-to-date than children adhering to the recommended schedule, while children with unknown or unclassifiable patterns were about 2.4 times likely to not be up-to-date. Table 1 depicts the statistical results.

Table 1. Results regarding schedule patterns, up-to-date status, and predictors

<table>
<thead>
<tr>
<th>Schedule patterns</th>
<th>Frequency (%)</th>
<th>Likelihood of being not up-to-date versus adhering to the schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Alternate (selective, restrictive, or</td>
<td>23</td>
<td>4.2</td>
</tr>
<tr>
<td>both</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown/Unclassifiable</td>
<td>15</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Discussion. Researchers understand that their up-to-date standard was more stringent with the inclusion of hepatitis A vaccine and rotavirus vaccine, resulting in the increased number of not up-to-date statuses as compared to other studies. They found that certain predictors considered external circumstances, such as receiving vaccines in a public, military, other, or unknown facility, may disrupt adherence to the recommended schedule, resulting in an unknown or unclassifiable schedule pattern. In addition, this study found that Hispanic children are more likely to be up-to-date, which is consistent with other studies. Future research should further examine these findings to determine best practices and create tailored interventions to support families to follow the ACIP-recommended schedule and be up-to-date on childhood vaccinations.
Pediatricians: Help Stop the Spread of Misinformation

Childhood vaccination coverage remains high nationally, and most parents are confident in the safety and effectiveness of vaccines. In this rapidly evolving public health environment, however, the spread of myths and misinformation can put communities at risk. When misleading information circulates, vaccination coverage can fall and increase the risk for outbreaks of vaccine-preventable diseases. For example, misinformation about the safety of measles, mumps, and rubella (MMR) vaccine has led to measles outbreaks in recent years.

You and your practice staff have a critical role to play in stopping the spread of misinformation right now, when parents are spending a lot of time reading health-related news and searching for guidance online. CDC research shows that healthcare professionals are parents’ most trusted source of vaccine information.

National Infant Immunization Week (NIIW) is April 25–May 2, 2020. This is a great time to build the digital media literacy skills of parents, so that they can be critical consumers of the information they read on immunization and other health topics.

Refer parents to trusted websites like CDC, Healthy Children, Vaccinate Your Family, or the Children’s Hospital of Philadelphia’s Vaccine Education Center. You can also share tips to help them evaluate the credibility of other websites. The National Institutes of Health’s guidance for evaluating online health resources suggests 5 questions to ask:

1. **Who** runs or created the site or app? Can you trust them?
2. **What** is the site or app promising or offering? Do its claims seem too good to be true?
3. **When** was its information written or reviewed? Is it up-to-date?
4. **Where** does the information come from? Is it based on scientific research?
5. **Why** does the site or app exist? Is it selling something?

Share these questions with parents via email blasts or social media. Encourage your staff to review these questions as well, so that they can be prepared when parents ask them about the validity of things they have heard online.

Primary care practices may be stretched thin right now, but if you are able, CDC encourages you to share messages about the importance of childhood immunization during NIIW. The 2020 NIIW digital media toolkit has sample social media content and graphics to save you time.

CDC has also released guidance for maintaining childhood immunizations during the COVID-19 pandemic. Please review and share with your colleagues as appropriate.

In these challenging times, let’s make sure that parents have the tools to find credible health information. The health of our communities depends on it.
Pediatricians once again can use either flu shots or nasal spray flu vaccines for their patients during the 2020-'21 season.

The AAP is keeping its recommendation the same as this season’s, saying any licensed, age-appropriate vaccine is acceptable, and everyone 6 months and older should be vaccinated.

“Given that vaccine effectiveness can vary year-to-year and the lack of any U.S. data to change the recommendation, we thought it would be really prudent to maintain the vaccine schedule the way it is,” said AAP Committee on Infectious Diseases (COID) Chair Yvonne A. Maldonado, M.D., FAAP.

The AAP and Centers for Disease Control and Prevention (CDC) did not recommend using the nasal spray (live attenuated influenza vaccine, LAIV) in 2016-'17 or 2017-'18 due to poor effectiveness against H1N1 strains. LAIV manufacturer AstraZeneca has since changed the formulation of the vaccine.

In 2018-'19, the AAP recommended the flu shot (inactivated influenza vaccine, IIV) as the primary choice and LAIV for children who would not otherwise receive a vaccine. After reviewing U.K. effectiveness data for the reformulated LAIV, the AAP did not express a preference between vaccines this season, and it will not express a preference next season.

Vaccine effectiveness in preventing medical visits due to flu this season has been 55% for children and 45% for the overall population, according to preliminary data from the CDC. However, those data are not broken down by vaccine type, and COID plans to watch for additional data sources.

“We keep a very close eye on influenza trends around the world for children on an ongoing basis,” Dr. Maldonado said.

Influenza A (H1N1)pdm09 has been the most commonly reported strain circulating in the U.S. this season despite an early surge in influenza B/Victoria viruses.

However, influenza B has taken a toll on children. There have been 155 pediatric deaths, higher than during the same period in every other year since reporting started in 2004-'05 with the exception of the 2009 H1N1 pandemic, according to data from the CDC.

Hospitalization rates for children also are unusually high. Children ages 4 and under have been hospitalized at a rate of 93.9 per 100,000 children, the highest on record for this point in the season. Rates for children ages 5-17 are 24.4 per 100,000 children, the highest in recent seasons except the 2009 H1N1 pandemic.

Overall, the CDC estimates about 39 million people have gotten sick, 400,000 have been hospitalized and 24,000 have died this season.

While much of the recent focus has been on the coronavirus disease 2019 (COVID-19) outbreak, Dr. Maldonado stressed the importance of being protected against flu as well. Unlike COVID-19, people can do that by getting vaccinated.

“We want to make sure we protect people against everything that’s out here that can really put people in the hospital and compromise their own health,” she said. “Influenza is not a simple cold. It’s a devastating disease that can lead to hospitalization and other bad health outcomes.”

The CDC’s Advisory Committee on Immunization Practices is expected to discuss its flu policy in June and is not expected to make major changes. If that is the case, the CDC and AAP vaccine policies will be similar next season. The AAP policy statement on influenza immunization in children will be published later this year in Pediatrics.

Resources

AAP policy “Recommendations for Prevention and Control of Influenza in Children, 2019-2020”
Information from the CDC about flu
Information for parents on flu vaccine from HealthyChildren.org
AAP News stories on flu
Information on flu from the AAP Red Book
Maintaining Childhood Immunizations During COVID-19 Pandemic

From the Centers for Disease Control and Prevention - Resources for Clinics and Healthcare Facilities

The COVID-19 pandemic is changing rapidly and continues to affect communities across the United States differently. Some of the strategies used to slow the spread of disease in communities include postponing or cancelling non-urgent elective procedures and using telehealth instead of face-to-face encounters for routine medical visits.

Ensuring the delivery of newborn and well-child care, including childhood immunization, requires different strategies. Healthcare providers in communities affected by COVID-19 are using strategies to separate well visits from sick visits. Examples include:

- Scheduling well visits in the morning and sick visits in the afternoon
- Separating patients spatially, such as by placing patients with sick visits in different areas of the clinic or another location from patients with well visits.
- Collaborating with providers in the community to identify separate locations for holding well visits for children.

Because of personal, practice, or community circumstances related to COVID-19, some providers may not be able to provide well child visits, including provision of immunizations, for all patients in their practice. **If a practice can provide only limited well child visits, healthcare providers are encouraged to prioritize newborn care and vaccination of infants and young children (through 24 months of age) when possible.** CDC is monitoring the situation and will continue to provide guidance.

**AAP Resources:**
- Critical Updates on COVID-19
- Clinical Guidance
- Telemedicine and Telephone Care
- Guidance on Providing Pediatric Ambulatory Services via Telehealth During COVID-19
- Pediatric Practice Management Tips During the COVID-19 Pandemic
- COVID-19 Clinical Guidance Q & A – Read this Q/A from AAP on recommendations for primary care pediatric offices in terms of addressing well child and sick visits and provision of immunizations.
- Discussion Board to connect with peers on topics related to COVID-19 (AAP login required)
- Technical Assistance Inquiry can be submitted here.

**Featured Provider Resources for Vaccine Conversations with Parents**

Talking with Parents about Vaccine for Infants

The CDC Provider Resources for Vaccine Conversations with Parents includes a handout Talking with Parents about Vaccines for Infants. Use this to resource to aid conversations with parents about vaccines.