2019 ANMC Protocol for Immunization Administration to Children (patients 0-18 years)

Screening Questions (*If any boxes are checked, consult provider)

- Is the patient sick today? Or is temperature >101 degrees (>100.4 degrees if <3 months)?
- Does the patient have an allergy to medications, food, latex or any vaccine component?
- Has the patient had a severe reaction to a vaccine in the past?
- Does the patient have a history of thrombocytopenia or thrombocytopenic purpura?
- Has the patient had a seizure, brain, or other nervous system problem?
- Does the patient have cancer, leukemia, HIV/AIDS, or immune system problem?
- Within the past 3 months, has the patient taken medications that affect the immune system such as steroids or anticancer drugs? Drugs for the treatment of rheumatoid arthritis, Crohn’s disease, or psoriasis; or had radiation treatments?
- Has the patient received blood products, immune globulin or antiviral drugs in the past year?
- If female, is the patient pregnant or might become pregnant in the next month?
- Has the patient received any vaccines in the past 4 weeks?
- For RotaTeq® if a baby, has a history of intussusception, or immunodeficiency?
- For Flu Vaccines, see most current Seasonal Flu Vaccine Protocol

(Optional) Use IAC Childhood Screening Form: [link to form]

Vaccine Contraindications and State Eligibility

- **All vaccines** Contraindications & precautions: [link to CDC guidelines]
- Live vaccines (MMR, Varicella, Rotavirus): immune deficiency, blood products, pregnancy
- Rotavirus: history of intussusception, severe combined immunodeficiency (SCID)
- Pregnancy: do not give MMR, Varicella, & HPV
- DTaP or Tdap: encephalopathy (e.g., coma, decreased level of consciousness, or prolonged seizures) not attributable to another identifiable cause within 7 days of administration of a previous dose of Tdap, DTaP, or DTaP vaccine.
- Mild illnesses (such as otitis media, URI and diarrhea) are not contraindications to vaccination.
- If doubt whether contraindication or precaution exists, get medical provider approval before administration

State-provided vaccine is for all children birth through 18 years of age, regardless of insurance or IHS beneficiary status. See [link to eligibility guidelines].

Preparation and Administration of Vaccines

- **7 Rights of Medication Administration:**
  - Right name and DOB
  - Right drug
  - Right dose
  - Right route
  - Right time/date
  - Right documentation
  - Right allergies

- Check vaccine name, ensure it is age-appropriate and check expiration date.
- Wash hands, draw up each vaccine separately.
- Label syringe with vaccine name.
- Use single-dose diluent vials from pharmacy to reconstitute Varicella and MMR vaccines.
- Use correct needle length and site:
  - IM 22-25 gauge needle, inject at 90°
  - subq 23 gauge needle, inject at 45°
    - <12 months: 5/8 inch (thigh)
    - >12 months: 5/8 inch (upper posterior arm)
  - Never inject vaccines in the buttocks.
  - Separate injection sites by 1 inch if injecting two or more vaccines in single limb.
  - Immediately discard used needle/syringe in labeled, puncture-proof containers.

Documention

- Order and document vaccines in Cerner. Required documentation: date of vaccination, vaccine name, dose, site and route of injection, manufacturer, lot number, expiration date, VIS publication date, funding source, VFC-eligibility. If vaccines are not given (i.e., contraindicated, refused), provider documents in Provider Note and CMA-nurse documents in Immunization Schedule or MAR.
- User guides in eCoach and [link to MAR documentation site].

Outpatient Clinics:

- CMA/LPN/RN: check VacTrAK for vaccines due and enter the order for vaccines in Cerner using "Protocol with Co-Signature"
- Provider: review vaccines due (using VacTrAK) and co-sign vaccine order.
- Vaccines may be given prior to provider co-signature.

VacTrAK (by CMA/LPN/RN)

- All vaccines transfer from Cerner to VacTrAK.
- If vaccines missing in VacTrAK, manually enter immunizations into VacTrAK.

Inpatient/ER/UCC Departments:

- Provider: orders vaccines in Cerner
- Nurse documents vaccine in MAR.
- VacTrAK: All vaccines transfer from Cerner to VacTrAK.
- If vaccines missing in VacTrAK, manually enter immunizations into VacTrAK.

Adverse Reaction Monitoring, Reporting and Management

- Instruct patient to remain in clinic for 20 minutes after injection to watch for an allergic adverse reaction. Adolescent should stay seated for 15 minutes to decrease risk of syncope (fainting)
- Management of Acute Allergic Reaction: anaphylaxis is very rare. Epinephrine and equipment for maintaining an airway should be available for immediate use.
- If an adverse reaction occurs, notify provider and complete an Event Report. File report to Vaccine Adverse Event Reporting System (VAERS) if indicated. [link to VAERS guidelines].

Source: ANNC imm child 2019 FINAL 2-19-19

This protocol supersedes any other immunization recommendations before this date.
## 2019 ANMC Protocol for Immunization Administration to Children (patients 0-18 years)

Follow chart below if there are no risk factors present.

### 2019 STANDARD CHILDHOOD VACCINE SCHEDULE (age birth through 18 years)

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Admin.</th>
<th>Birth</th>
<th>6wks-2m</th>
<th>4m</th>
<th>6m</th>
<th>12-15m</th>
<th>18m</th>
<th>19-23m</th>
<th>4-6yrs</th>
<th>11-18yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hep B†</td>
<td>0.5 ml IM</td>
<td>Hep B</td>
<td></td>
<td></td>
<td></td>
<td>Infanrix®</td>
<td></td>
<td>Kinrix®</td>
<td></td>
<td>Tdap</td>
</tr>
<tr>
<td>DTaP† and Tdap†</td>
<td>0.5 ml IM</td>
<td></td>
<td>Pediarix®</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 ml IM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPV</td>
<td>0.5 ml IM</td>
<td></td>
<td>Pediatric</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rotavirus†</td>
<td>2 ml ORAL</td>
<td>RotaTeq†</td>
<td>RotaTeq†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal†</td>
<td>0.5 ml IM</td>
<td>Prevnar13®</td>
<td>Prevnar13®</td>
<td></td>
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<td>Prevnar13®</td>
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<td>Prevnar13®</td>
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</tr>
<tr>
<td>Hib</td>
<td>0.5 ml IM</td>
<td>PedvaxHib®</td>
<td>PedvaxHib®</td>
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</tr>
<tr>
<td>MMR</td>
<td>0.5 ml SQ</td>
<td></td>
<td>MMR</td>
<td></td>
<td></td>
<td>MMR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella†</td>
<td>0.5 ml SQ</td>
<td></td>
<td>Varivax®</td>
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<td>Varivax®</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hep A</td>
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<td>Hep A</td>
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<td></td>
<td>Hep A</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>HPV</td>
<td>0.5 ml IM</td>
<td></td>
<td>Gardasil®</td>
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<td></td>
<td>Menactra®</td>
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<td></td>
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</tr>
<tr>
<td>Meningococcal®†</td>
<td>0.5 ml IM</td>
<td>(Meningococcal - 2 months-18 years old high risk †)</td>
<td>(Meningococcal - 2 months-18 years old high risk †)</td>
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</tr>
</tbody>
</table>

1 Hep B (ped/ado): first Hep B within 24 hours after birth. Use Pediarix® to complete the Hep B series. Final Hep B dose given no earlier than 36 months of age and at least 8 weeks after prior dose & 16 weeks after first dose. A total of four doses of Hep B are permitted when a combination vaccine (Pediarix®) is used after birth dose.

2 DTaP: min, age 42 days, Pediarix® (DTaP-Hep B-IPV) is used for doses 1, 2 and 3 of DTaP. Don’t use Pediarix® for DTaP doses 4 and 5 if child is ≥7 yrs old. Give DTaP dose 4 at 12 mos of age if 6 mos interval after dose 3. Don’t need DTaP dose 5 if dose 6 was given ≥4 yrs of age, Kinrix® (DTaP-IPV) is for 4 y-r 6 yrs old only.

3 IPV: min, age 42 days. Pediarix® is used for doses 1, 2 and 3 of IPV. Final IPV dose must be given at 4 years of age or older and at least 6 months after previous dose.

4 Rotavirus (RotaTeq®): min, age 42 days. Maximum age for first dose is 14 weeks, 6 days. Don’t start series if ≥15 weeks old. Give all doses by age 8 months, 9 days.

5 Pneumococcal High risk recommendations for children and adults: review CDC vaccine schedules and additional details in CDC MMWR: Pneumococcal Vaccine PCV13 (Prevnar13®): min, 42 days, PPSV23 (Pneumovax23®): min, 2 yrs. For children and adults with cochlear implant, CSF leak, immunocompromised, HIV, chronic renal failure, nephrotic syndrome, asplenia and other high risk medical conditions such as chronic heart or lung disease, chronic liver disease, cirrhosis, diabetes, asthma (<12 yrs if treated with high-dose oral steroids), alcoholism, smokers (age ≥12 yrs): review CDC recommendations to determine specific recommendations.

6 Haemophilus influenzae High risk recommendations for children and adults: review CDC vaccine schedules and additional details in CDC MMWR: Hib Vaccine

Hib (PRP-OMP) (PedvaxHib®): min, 42 days. For children and adults with high risk medical conditions such as asplenia, hematopoietic stem cell transplant (HSCT), HIV (age ≤18 yrs), complement component deficiency, immunocompromised: review CDC recommendations.

7 MMR and Varicella: min, age 12 mos. Second dose of MMR and Varicella routine at 4-6 years old. Give MMR and Varicella to adults with no evidence of immunity, see CDC vaccine schedules. For MMR before international travel: review CDC vaccine schedules. Consult State if traveling to U.S. location with measles outbreak.

8 Hep A (ped/ado): min, age 12 months. Two doses of Hep A vaccine given at least 6 months apart. Give Hep A vaccine to persons ≥12 years old experiencing homelessness.

9 HPV (Gardasil®): min, age 9 yrs. Routine at 11-12 yrs of age. May start series at 9 yrs of age. If starting/start before age 15 years, 2-dose series, doses 6-12 months apart. If starting/start at age 15 years or older, 3-dose series at 0, 1-2, 6 months. If person age 9-26 years has 2 doses (at least 5 months apart) and started series before age 15 years, they are complete. If series started with 4 HPV, finish series with 9 HPV. Immunocompromised persons receive 3-dose series regardless of age initiation.

10 Meningococcal High risk recommendations for children and adults: review CDC vaccine schedules and additional details in CDC MMWR: Meningococcal Vaccine

MenACWY (Menactra®): min, age 9 mos. Routine for 11-18 year olds. If first dose given at 11-15 yrs old, give booster at 16-18 yrs old (min, interval 8 weeks); if first dose given at ≥16 yrs old, dose 2 not recommended. High risk includes asplenia, HIV, complement deficiency, eclampsia, see CDC recommendations.

MenB (Trumenba®, Bexsero®): For high risk age ≥10 yrs (includes asplenia, complement deficiency, eclampsia). Persons 16-23 years not at increased risk may receive.

11 Tdap (Adacel®, Boostrix®): One dose Tdap routine at 11-12 yrs, Single dose Tdap in lifespan; except give Tdap dose during each pregnancy, preferably during early part of 27-36 weeks gestation. One Tdap dose for unimmunized 7-10 year olds. Td every 10 years after single dose of Tdap. Give Tdap regardless of interval fromTd.

12 Hepatitis (adult): Hep B vaccine for sero-negative unvaccinated adults, high risk includes chronic liver disease, diabetes (age ≥50 yrs), hepatitis C, other exposure risks.

Hep A vaccine for sero-negative unvaccinated adults, high risk includes chronic liver disease, clotting disorders, MSM, HIV, illicit drug use, homelessness, for travel, Hepatitis B, Varicella, other exposure risks: review CDC vaccine schedules and additional details in CDC MMWR: Hepatitis A and Hepatitis B Vaccine.

13 Zoster RZV (Shingrix®): Give 2 doses RZV regardless of past episode of herpes zoster or receipt of ZVL (Zostavax®), If previous ZVL, give RZV ≥2 mos after ZVL.

If not given on the same day, there is a 4 week minimum interval between live vaccines (MMR, Varicella, LAIV), and between live vaccines and PPD.

For risk conditions/special situations/pregnancy, consult the CDC vaccine schedules: [http://www.cdc.gov/vaccines/schedules/index.html](http://www.cdc.gov/vaccines/schedules/index.html).

### Implementation of Protocols

**Outpatient Clinic:** This protocol, signed by the Medical Directors, serves as a pre-authorized order for RN, LPN, and CMA who have demonstrated competency to administer vaccines according to the protocol criteria. The immunization event is co-signed in Cerner by the attending provider.

**Inpatient/ER/UIC Department:** Provider orders vaccine in Cerner and RN documents immunization in Cerner MAR. A provider’s order is required for all vaccines.

The Criteria Contained in this Protocol is Derived from:

- General Best Practice Guidelines for Immunizations: [https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html](https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html)

**PCC Medical Director:**

**PCC Nursing Director:**

**President Medical Staff:**

**Chief Nursing Officer:**

**Director of Pharmacy:**

These protocols shall remain in effect until April 30, 2020.

Source: ANMC mm child 2019 FINAL 2-19-19

This protocol supersedes any other immunization recommendations before this date.