Immunizations and Health Promotion – Other Adult Vaccinations

Strength of Evidence Level: 3

PURPOSE:
To reduce morbidity and mortality from vaccine preventable illnesses by vaccinating all adults who meet the criteria established by the Centers for Disease Control and Prevention’s (CDC’s) Advisory Committee on Immunization Practices (ACIP).

CONSIDERATIONS:
1. The CDC’s Vaccine Information Sheet (VIS) for the vaccine and the Agency Consent Form will guide which patients are eligible for each vaccination. The list includes but is not limited to:
   a. Tetanus, diphtheria, pertussis (Td/Tdap).
   b. Human papillomavirus.
   c. Varicella.
   d. Zoster.
   e. Measles, mumps, rubella.
   f. Influenza.
   g. Pneumococcal.
   h. Hepatitis A.
   i. Hepatitis B.
   j. Meningococcal.
2. See Table 1 for vaccination recommendations by age range. Table 2 for vaccination recommendation based on medical indications. [Link]
3. The CDC and other agencies seek to improve adult immunization rates and decrease complications from these vaccine preventable diseases.
4. The clinician should be sure to check the CDC’s Website for any updates or changes in immunization schedules or guidelines.

EQUIPMENT:
- Gloves
- Vaccine
- Syringes
- Alcohol preps
- Self-adhesive bandages
- 2 x 2 gauze, optional
- Anaphylaxis kit

PROCEDURE:
1. Staff will discuss vaccine recommendations based on patient’s medical history and age.
2. The nurse will discuss need for indicated vaccine and obtain standing order as appropriate or obtain physician order for vaccine to be given. Patient/caregiver will obtain vaccine when necessary.
3. Contraindications to receiving the vaccine will be determined by VIS guidelines and the Agency Consent form. The agency or patient/caregiver will follow “Cold Chain instructions for refrigerated vaccines” to ensure the safety and efficacy of the vaccine.
4. The nurse will obtain written consent for administering vaccine from the patient/guardian. Vaccine is administered according to physician order.
5. Administer vaccination using 1 to 1.5 inch needles.
6. Observe for at least 30 minutes for anaphylactic reaction. Follow anaphylactic protocol when necessary.
7. A VIS will be distributed to patients reinforcing verbal instruction to call with adverse symptoms.
8. Report all clinically significant post-vaccination reactions to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions on filing a VAERS report are available at [Link] or by telephone, 800-822-7967.

AFTER CARE:
1. Document administration of vaccination on consent form and in health record, when appropriate.

REFERENCES:
CDC. (n.d.) CDC. Retrieved from [Link]
PURPOSE:
To maintain the cold chain in transportation of refrigerated vaccine.

CONSIDERATIONS:
1. It is important to maintain refrigerated vaccine at the appropriate temperatures.
2. The National Center for Immunization and Respiratory Diseases (NCIRD), Centers for Disease Control and Prevention (CDC) strongly recommends that providers draw vaccine only at the time of administration to ensure that the cold chain is maintained and that vaccine is not inappropriately exposed to light. DO NOT pre-draw doses before they are needed.

EQUIPMENT:
- Insulated container
- Cold packs
- Vaccine
- Foam or bubble wrap, optional

PROCEDURE:
1. In a clean agency-approved insulated container, place a solid single layer of intact frozen ice packs (DO NOT USE ICE). Cover ice packs with foam sheeting, crumpled paper or bubble-wrap.
2. Obtain appropriate refrigerated vaccine from appropriate department. Vaccine may be kept in original packaging.
3. Place vaccine in container on top of cold packs/foam sheeting/bubble-wrap. Place another layer of foam sheeting, crumpled paper or bubble-wrap on top of vaccine. Cover this with another solid single layer of frozen ice packs. From the bottom of the container to the top of the container, the correct layering is: ice packs, foam/bubble-wrap, vaccine, foam/bubble-wrap, ice packs.
4. Immediately move insulated container to site. Keep lid on container at all times, only opening the container to remove vaccine/replace vaccine. Ice packs should be checked frequently to check for thawing. Once thawing is indicated, ice packs are to be replaced with fresh frozen ice packs, or the vaccine is to be moved to an approved refrigerated unit. Vaccine is not to be kept on ice packs any longer than a maximum of 12 hours.
5. Return unused vaccine in cooled, insulated container to agency. Replace vaccine in agency’s refrigerated unit. Inspect ice packs for damage. Undamaged ice packs should be returned to freezer. Wipe any dampness from clean insulated cooler.

For influenza clinics and pre-filling syringes:
Although pre-drawing vaccine is generally discouraged, a limited amount of vaccine may be pre-drawn in a mass immunization setting if the following procedures are followed:
1. Only one vaccine type may be administered at the clinic. If more than one vaccine type is to be administered, separate vaccine administration stations must be set up for each vaccine type to prevent medication errors.
2. Vaccine should not be prepared in advance of arriving at the clinic site. Because of the lack of data on the stability of vaccine stored in plastic syringes, the practice of drawing up quantities of vaccine hours or even days before a clinic is not acceptable.
3. Vaccine should be transported to the clinic site in the manufacturer-supplied packaging.
4. Inactivated influenza vaccine must be maintained at 35-46 degrees Fahrenheit (2-8 degrees Celcius), either inside a refrigerator or inside a properly chilled vaccine transport container. If the vaccine is stored in a transport container, an insulating barrier—such as crumpled paper or bubble wrap—must be placed between the vaccine and the refrigerated/frozen packs.
5. Upon arrival at the clinic site, each healthcare worker (HCW) may draw up a small quantity of vaccine to meet the initial needs of the clinic—no more than 1 vial or 10 doses, whichever is greater. This will limit the amount of time the vaccine is held in the syringe before administration and reduce vaccine wastage.
6. During the clinic, clinicians should alternate activities. One may stop vaccinating and fill additional syringes as needed; when this HCW resumes vaccinating, the other HCW may stop and draw up additional vaccine as needed. This minimally slows the patient flow, limits the amount of vaccine drawn up at any one time, and conforms to good medication administration practices, in which each HCW administers the vaccine he or she drew up.
7. Patient flow should be monitored to avoid drawing up unnecessary doses.
8. At the end of the clinic day, any remaining vaccine in syringes should be discarded. Vaccine that has been drawn up and not administered may not be used on subsequent days.

AFTER CARE:
1. Notify appropriate manager if vaccine was not maintained in cold chain.

REFERENCES:
**Figure 1. Recommended schedule for adult immunization, by vaccine and age group**

<table>
<thead>
<tr>
<th>VACCINE</th>
<th>AGE GROUP</th>
<th>19–49 years</th>
<th>50–64 years</th>
<th>≥65 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetanus, diphtheria, pertussis (Td/Tdap)</td>
<td>1 dose Td booster every 10 yrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human papillomavirus (HPV)</td>
<td>3 doses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles, mumps, rubella (MMR)</td>
<td>1 or 2 doses</td>
<td>1 dose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella</td>
<td>2 doses (0, 4–8 wks)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza</td>
<td>1 dose annually</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal (polysaccharide)</td>
<td>1–2 doses</td>
<td></td>
<td>1 dose</td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>2 doses (0, 6–12 mos or 0, 6–18 mos)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>3 doses (0, 1–2, 4–6 mos)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningococcal</td>
<td>1 or more doses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoster</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Covered by the Vaccine Injury Compensation Program.*

For all persons in this category who meet the age requirements and who lack evidence of immunity (e.g., lack documentation of vaccination or have no evidence of prior infection) recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications).

Report all clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions on filing a VAERS report are available at www.vaers.hhs.gov or by telephone, 800-822-7967.

Information on how to file a Vaccine Injury Compensation Program claim is available at www.hrsa.gov/vaccinecompensation or by telephone, 1-800-338-2382. To file a claim for vaccine injury, contact the U.S. Court of Federal Claims, 711 Madison Place, N.W., Washington, D.C. 20001 (telephone, 202-351-4400).

Additional information about the vaccines in this schedule, extent of available data, and contraindications for vaccination is also available at www.cdc.gov/vaccines or from the CDC-INFO Contact Center at 800-CDC-INFO (800-232-4636) in English and Spanish, 24 hours a day, 7 days a week.

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**Figure 2. Vaccines that may be indicated for adults based on medical and other conditions**

<table>
<thead>
<tr>
<th>VACCINE</th>
<th>INDICATION</th>
<th>19–49 years</th>
<th>50–64 years</th>
<th>≥65 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetanus, diphtheria, pertussis (Td/Tdap)</td>
<td>1 dose Td booster every 10 yrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human papillomavirus (HPV)</td>
<td>3 doses for females through age 26 yrs (0, 2, 6 mos)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles, mumps, rubella (MMR)</td>
<td>Contraindicated</td>
<td>1 or 2 doses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella</td>
<td>Contraindicated</td>
<td>2 doses (0, 4–8 wks)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza</td>
<td>1 dose TIV annually</td>
<td></td>
<td>1 dose TIV or LAIV annually</td>
<td></td>
</tr>
<tr>
<td>Pneumococcal (polysaccharide)</td>
<td>1–2 doses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>2 doses (0, 6–12 mos or 0, 6–18 mos)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Hepatitis B</td>
<td>3 doses (0, 1–2, 4–6 mos)</td>
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<td></td>
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<td>Meningococcal</td>
<td>1 or more doses</td>
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For all persons in this category who meet the age requirements and who lack evidence of immunity (e.g., lack documentation of vaccination or have no evidence of prior infection) recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications).

These schedules indicate the recommended age groups and medical indications for which administration of currently licensed vaccines are commonly indicated for adults ages 19 years and older, as of October 1, 2007. Licensed combination vaccines may be used whenever any components of the combination are indicated and when the vaccine’s other components are not contraindicated. For detailed recommendations on all vaccines, including those used primarily for travelers or that are issued during the year, consult the manufacturers’ package inserts and the complete statements from the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/pubs/acip-list.htm).

The recommendations in this schedule were approved by the Centers for Disease Control and Prevention’s (CDC) Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians (AAFP), the American College of Obstetricians and Gynecologists (ACOG), and the American College of Physicians (ACP).