ACIP recommends annual influenza vaccination for all people ages 6 months and older. To read the provisional influenza vaccination recommendations, click here.

CDC encourages providers to begin offering influenza vaccine to people of all ages as soon as it becomes available (usually mid-to-late summer). Note: Early vaccination of children younger than age 9 years who are first-time vaccinees (or who failed to get their second dose in the preceding season) can be helpful in assuring there is adequate time to receive routine second doses before the influenza season begins.

On April 30, 2010, CDC published ACIP's guidance for use of a high-dose injectable inactivated trivalent influenza vaccine (Fluzone High-Dose; Sanofi Pasteur). The vaccine, which will be available for the 2010-11 influenza season, was licensed as a single dose for use in people age 65 years and older by the FDA in December 2009. ACIP has not expressed a preference for Fluzone High-Dose or any specific licensed inactivated trivalent influenza vaccine for use in people age 65 years and older. To access the ACIP guidance for use of Fluzone High-Dose, click here.

Effective May 12, 2010, Chapter 7 of the Iowa Immunization Law was updated to reflect revised ACIP recommendations on Polio vaccine.

This change affects children born after September 15, 2003, who have received 3 doses of Polio vaccine with the 3rd dose administered on or after the 4th birthday. These children have been age appropriately vaccinated and are in compliance with Iowa immunization law (footnote number 5 on the requirements chart).

It is important to review the footnotes of the Immunization Requirements chart when evaluating if a child meets Iowa Immunization Law. The Immunization Requirements chart appears on page 6 of this newsletter.

If you have questions about Iowa’s Immunization Law contact Terri Thornton, Nurse Consultant, at 800-831-6292, ext 2.
Many children in my practice have received their complete series of 7-valent pneumococcal conjugate vaccine (PCV7). Would you please review the recommendations for which of them now need a supplemental dose of 13-valent pneumococcal conjugate vaccine (PCV13)?

A single supplemental dose of PCV13 is recommended for all children ages 14 through 59 months who have received the complete 4-dose series of PCV7 or another age-appropriate, complete PCV7 schedule.

For children who have underlying medical conditions, a single supplemental PCV13 dose is recommended through age 71 months.

This also includes children who have previously received pneumococcal polysaccharide vaccine (PPSV23).

The single supplemental dose of PCV13 should not be administered sooner than 8 weeks after the last dose of PCV7 or PPSV23 was given.

Immunization Action Coalition has created a table that explains the use of PCV13 to catch up children who have fallen behind on their PCV7 doses. Click here to view.

New CDC Recommendations For the Use of MMRV Vaccine

On May 7, 2010, CDC issued new recommendations for the use of combination MMRV vaccine.

Prior to issuing these recommendations, ACIP reviewed results of post-licensure studies that suggest that, during the 5–12 day post-vaccination period, approximately one additional febrile seizure occurred among every 2,600 children ages 12 through 23 months vaccinated with a first dose of MMRV vaccine, when compared with children in the same age group vaccinated with separate first doses of MMR vaccine and varicella vaccine administered during a single office visit.

The summary of the recommendations for use of MMRV vaccine are as follows:

- The routinely recommended ages for measles, mumps, rubella, and varicella vaccination continue to be age 12 through 15 months for the first dose and age 4 through 6 years for the second dose.
- For the first dose of measles, mumps, rubella, and varicella vaccines at age 12 through 47 months, providers may use either MMR vaccine and varicella vaccine or MMRV vaccine. Providers who are considering administering MMRV vaccine should discuss the benefits and risks of both vaccination options with the parents or caregivers. Unless the parent or caregiver expresses a preference for MMRV vaccine, CDC recommends that providers administer MMR vaccine and varicella vaccine for the first dose in this age group (12-47 months).
- A personal or family (i.e., sibling or parent) history of seizures of any etiology (i.e., cause) is a precaution for MMRV vaccination, and such children generally should be vaccinated with MMR vaccine and varicella vaccine.

Unless the parent or caregiver expresses a preference for MMRV vaccine, CDC recommends that providers administer MMR vaccine and varicella vaccine for the first dose in this age group.

For the second dose of measles, mumps, rubella, and varicella vaccines at any age (15 months through 12 years) and for the first dose at age 48 months and older, use of MMRV vaccine generally is preferred over separate injections of its equivalent component vaccines (i.e., MMR vaccine and varicella vaccine).

A personal or family (i.e., sibling or parent) history of seizures of any etiology (i.e., cause) is a precaution for MMRV vaccination, and such children generally should be vaccinated with MMR vaccine and varicella vaccine.

The complete recommendations for the use of MMRV vaccine are available by clicking here. In addition, CDC has issued a new VIS for MMRV vaccine, dated 5/21/10, which is available by clicking here. As with all other VISs, parent or vaccine recipient should be given the VIS prior to vaccination to facilitate discussion about the vaccine between the patient and provider.
FDA Approves Resuming Use of Rotarix Vaccine

On May 14, 2010, the FDA issued updated recommendations for using rotavirus vaccine, announcing that clinicians can resume using Rotarix vaccine (RV1; GSK) and continue using RotaTeq vaccine (RV5; Merck).

Previously, on March 22, 2010, the FDA had recommended that U.S. clinicians and public health professionals temporarily suspend use of Rotarix while the FDA and GSK investigated the finding of DNA from porcine circovirus type 1 (PCV1) in the vaccine. The FDA and GSK have since confirmed the presence of PCV1 in the vaccine.

On May 6, 2010, the FDA indicated that Merck's preliminary studies of RotaTeq had identified fragments of DNA from PCV1 and from a related porcine circovirus type 2 (PCV2) in RotaTeq.

The FDA has evaluated laboratory results from the manufacturers and its own laboratories. Based on a careful evaluation of this information, a thorough review of the scientific literature, and input from scientific and public health experts, the FDA announced that clinicians can resume using Rotarix and continue using RotaTeq.

The FDA noted that there is no evidence that either PCV1 or PCV2 poses a safety risk in humans and that neither is known to cause infection or illness in humans. For additional information on this topic click here.

On May 14, 2010, CDC published a revised interim VIS for the use of rotavirus vaccine. The new VIS includes the following information: “A virus (or parts of the virus) called porcine circovirus is in both rotavirus vaccines. This virus is not known to infect people and there is no known safety risk.”

For more information, see www.fda.gov or to access the VIS click here.
VFC Vaccine Accountability

The National Vaccines for Children (VFC) Program has grown to be more than a $3 billion annual program. With such a large program there is significant need for accountability to prevent vaccine fraud and abuse.

One of the Iowa’s VFC Program’s means of vaccine accounting is doses administered reporting. It is critically important for all VFC Program providers to submit monthly doses administered reports or enter doses administered into the Immunization Registry Information System (IRIS). If doses administered data, which relates to vaccine inventory, are not appropriately accounted for, orders for VFC vaccine may be reduced.

Prior to placing vaccine orders it is important to assure IRIS data entry is up to date (doses administered entered as a “Give”) or doses administered reports have been submitted to the VFC Program and assure that IRIS vaccine inventory matches refrigerator/freezer inventory on a monthly basis.

The CDC is closely monitoring the number of vaccine orders placed for each state. Iowa VFC Program providers should not place vaccine orders more than once a month. Placing vaccine orders more frequently leads to increased cost to fulfill orders and to distribute the orders to health care providers.

If you have any questions regarding reductions in your vaccine order please contact Tina Patterson at 800-831-6293, ext 4.

IRIS Tip: How to effectively search for patient records

Currently there are more than 2.3 million records in the Immunization Registry Information System (IRIS). The most effective way to search for a patient’s record is by the patient’s date of birth which eliminates the possibility of misspelled names or nicknames. If the desired patient is not found, search instead by a few letters of the first and last name without a date of birth. Searching for patient records with less information will produce more matching records. This list will allow you to be sure the correct patient record is open and immunizations are documented properly.

IRIS staff routinely identify and resolve duplicate records in IRIS. If duplicate records are discovered, update only one of the records with the immunizations you are giving. If discrepancies are found, such as misspelled names or incorrect date of birth, make the necessary corrections to the record and report the duplicate record to the IRIS Help Desk.

When contacting the IRIS Help Desk include the patient’s last name, first name, and date of birth.

If you have questions regarding IRIS, contact the Help Desk at 800-374-3958.

Updated HPV Recommendations

On May 28, 2010, CDC published updated recommendations for human papillomavirus (HPV) vaccination of females with bivalent HPV vaccine (HPV2; Cervarix; GSK) and quadrivalent HPV vaccine (HPV4; Gardasil; Merck).

Routine vaccination with 3 doses of either HPV2 or HPV4 is recommended for females ages 11 or 12 years and can be started in females as young as 9 years of age. Vaccination is recommended for females ages 13 through 26 years who have not been vaccinated previously or who have not completed the 3-dose series. If a female reaches age 26 years before the vaccination series is complete, remaining doses can be administered after age 26 years.

Ideally, vaccine should be administered before potential exposure to HPV through sexual contact. To access the updated recommendations, click here and see pages 626-629.

On May 28, 2010, CDC published guidance for human papillomavirus (HPV) vaccination of males with quadrivalent HPV vaccine (HPV4; Gardasil; Merck). The 3-dose series of HPV4 may be given to males age 9 through 26 years to reduce their likelihood of acquiring genital warts. HPV4 would be most effective when given before exposure to HPV through sexual contact. To access CDC’s guidance click here.
Common Myth: If the thermometer shows a temperature reading outside the recommended range something must be wrong with the thermometer.

Fact: If a temperature reading is outside the recommended range, the thermometer should be assumed to be correct until proven otherwise. Check your back up thermometer. Always take immediate action when temperatures are out of range and document your actions. Click here to view IDPH Trouble Shooting Log.

Type
- There are several types of thermometers you can use. Vaccines are expensive. It is important to invest in the best thermometer you can afford and understand how to use it.
- Use only certified calibrated thermometers for measuring vaccine storage unit temperatures. All thermometers are calibrated during manufacturing, meaning they are given a temperature scale. Certified calibrated thermometers undergo a second individual calibration against a reference standard from an appropriate agency, such as the National Institute of Standards and Technology (NIST).

Maintenance
- Certified calibrated thermometers require periodic recertification and recalibration against reference thermometers in order to remain accurate. The Iowa Department of Public Health, Immunization Program recommends adhering to the recalibration schedule recommended by the manufacture..
- If the thermometer is electronic, change the battery on a regular basis.
- To prevent wire breakage in the probe cord consider coiling some of the cord inside the storage unit and some on the outside and taping the part that passes between the door flush with the surface.
- Consider placing the thermometer on top of the unit rather than relying on the magnet or Velcro to hold it in place on the front on the unit. This will help avoid those accidental drops that can damage a thermometer.

Use
- Temperatures need to be documented twice each day, when the clinic opens and again at the end of the day. This recommendation applies regardless of whether or not there is a temperature alarm, a chart recorder thermometer, or a digital data logger.
- The thermometer should be placed in the center of the storage compartment, adjacent to the vaccine, away from the coils, walls, floor, and fan in order to obtain a true reading of the temperature.
- In the refrigerator, the thermometer should be placed on the middle shelf, or hanging down from the upper shelf.
- In the freezer, the thermometer should be suspended from the ceiling of the compartment or placed on a box or some other item that is in the middle of the compartment off the floor.
- A backup thermometer should also be in each storage unit.

Click the links in orange o access IDPH temperature logs (Fahrenheit / Celsius). If you have questions regarding thermometers, please contact Terri Thornton, Nurse Consultant, at 800-831-6292, ext 2.

CDC is offering several new training courses for immunization providers. A self-study course focusing on Adult Immunization was released June 15, 2010.

The annual Epidemiology and Prevention of Vaccine-Preventable Diseases has just been released and it has been expanded to nine self-study modules and is now available on DVD or in web-on-demand format. To order one free copy of the DVD using the NCIRD ordering system, click here and then scroll down to item #22-0068.
**IMMUNIZATION REQUIREMENTS**

Applicants enrolled or attempting to enroll shall have received the following vaccines in accordance with the doses and age requirements listed below. If, at any time, the age of the child is between the listed ages, the child must have received the number of doses in the “Total Doses Required” column.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Age</th>
<th>Vaccine</th>
<th>Total Doses Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 4 months of age</td>
<td>This is not a recommended administration schedule, but contains the minimum requirements for participation in licensed child care. Routine vaccination begins at 2 months of age.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 months through 5 months of age</td>
<td>Diphtheria/Tetanus/Pertussis</td>
<td>1 dose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polio</td>
<td>1 dose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>haemophilus influenzae type B</td>
<td>1 dose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pneumococcal</td>
<td>1 dose</td>
</tr>
<tr>
<td></td>
<td>6 months through 11 months of age</td>
<td>Diphtheria/Tetanus/Pertussis</td>
<td>2 doses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polio</td>
<td>2 doses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>haemophilus influenzae type B</td>
<td>2 doses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pneumococcal</td>
<td>2 doses</td>
</tr>
<tr>
<td></td>
<td>12 months through 18 months of age</td>
<td>Diphtheria/Tetanus/Pertussis</td>
<td>3 doses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polio</td>
<td>2 doses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>haemophilus influenzae type B</td>
<td>2 doses; or 1 dose received when the applicant is 15 months of age or older.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pneumococcal</td>
<td>3 doses if the applicant received 1 or 2 doses before 12 months of age; or 2 doses if the applicant has not received any previous doses or has received 1 dose on or after 12 months of age.</td>
</tr>
<tr>
<td></td>
<td>19 months through 23 months of age</td>
<td>Diphtheria/Tetanus/Pertussis</td>
<td>4 doses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polio</td>
<td>3 doses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>haemophilus influenzae type B</td>
<td>3 doses, with the final dose in the series received on or after 12 months of age, or 1 dose received when the applicant is 15 months of age or older.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pneumococcal</td>
<td>4 doses; or 3 doses if the applicant received 1 or 2 doses before 12 months of age; or 2 doses if the applicant has not received any previous doses or has received 1 dose on or after 12 months of age.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Measles/Rubella¹</td>
<td>1 dose of measles/rubella-containing vaccine received on or after 12 months of age; or the applicant demonstrates a positive antibody test for measles and rubella from a U.S. laboratory.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vacciella</td>
<td>1 dose received on or after 12 months of age if the applicant was born on or after September 15, 1997, unless the applicant has had a reliable history of natural disease.</td>
</tr>
<tr>
<td></td>
<td>24 months and older</td>
<td>Diphtheria/Tetanus/Pertussis</td>
<td>4 doses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polio</td>
<td>3 doses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>haemophilus influenzae type B</td>
<td>3 doses, with the final dose in the series received on or after 12 months of age, or 1 dose received when the applicant is 15 months of age or older.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pneumococcal</td>
<td>4 doses if the applicant received 3 doses before 12 months of age; or 3 doses if the applicant received 2 doses before 12 months of age; or 2 doses if the applicant received 1 dose before 12 months of age or received 1 dose between 12 and 23 months of age; or 1 dose if no doses had been received prior to 24 months of age.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Measles/Rubella¹</td>
<td>1 dose of measles/rubella-containing vaccine received on or after 12 months of age; or the applicant demonstrates a positive antibody test for measles and rubella from a U.S. laboratory.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vacciella</td>
<td>1 dose received on or after 12 months of age if the applicant was born on or after September 15, 1997, unless the applicant has had a reliable history of natural disease.</td>
</tr>
<tr>
<td></td>
<td>4 years of age and older</td>
<td>Diphtheria/Tetanus/ Pertussis ³, ⁴</td>
<td>3 doses, with at least 1 dose of diphtheria/tetanus/pertussis-containing vaccine received on or after 4 years of age if the applicant was born on or before September 15, 2000; or 4 doses, with at least 1 dose of diphtheria/tetanus/pertussis-containing vaccine received on or after 4 years of age if the applicant was born after September 15, 2000, but before September 15, 2003; or 5 doses with at least 1 dose of diphtheria/tetanus/pertussis-containing vaccine received on or after 4 years of age if the applicant was born on or after September 15, 2003.³ DTaP is not indicated for persons 7 years of age and older, therefore, a tetanus-and diphtheria-containing vaccine should be used.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polio</td>
<td>3 doses, with at least 1 dose received on or after 4 years of age if the applicant was born on or before September 15, 2003; or 4 doses, with at least 1 dose received on or after 4 years of age if the applicant was born after September 15, 2003, unless the applicant has had a reliable history of natural disease; or 5 doses with at least 1 dose received on or after 4 years of age if the applicant was born on or after September 15, 2003, unless the applicant has had a reliable history of natural disease.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Measles/Rubella¹</td>
<td>2 doses of measles/rubella-containing vaccine; the first dose shall have been received on or after 12 months of age; the second dose shall have been received no less than 28 days after the first dose; or the applicant demonstrates a positive antibody test for measles and rubella from a U.S. laboratory.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hepatitis B</td>
<td>3 doses if the applicant was born on or after July 1, 1994.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vacciella</td>
<td>1 dose received on or after 12 months of age if the applicant was born on or after September 15, 1997, but born before September 15, 2003, unless the applicant has had a reliable history of natural disease; or 2 doses received on or after 12 months of age if the applicant was born on or after September 15, 2003, unless the applicant has had a reliable history of natural disease.</td>
</tr>
</tbody>
</table>

¹ Mumps vaccine may be included in measles/rubella-containing vaccine.
² The 5th dose of DTaP is not necessary if the 4th dose was administered on or after 4 years of age.
³ Applicants 7 through 18 years of age who received their 1st dose of diphtheria/tetanus/pertussis-containing vaccine before 12 months of age should receive a total of 4 doses, with one of those doses administered on or after 4 years of age.
⁴ Applicants 7 through 18 years of age who received their 1st dose of diphtheria/tetanus/pertussis-containing vaccine at 12 months of age or older should receive a total of 3 doses, with one of those doses administered on or after 4 years of age.
⁵ If an applicant received an inactivated poliovirus (IPV) or oral poliovirus (OPV) series, a 4th dose is not necessary if the 3rd dose was administered on or after 4 years of age.
⁶ If both OPV and IPV were administered as part of the series, a total of 4 doses are required, regardless of the applicant’s current age.
⁷ Administer 2 doses of varicella vaccine, at least 3 months apart, to applicants less than 13 years of age. Do not repeat the 2nd dose if administered 28 days or greater from the 1st dose. Administer 2 doses of varicella vaccine to applicants 13 years of age or older at least 4 weeks apart. The minimum interval between the 1st and 2nd dose of varicella for an applicant 13 years of age or older is 28 days.