February 27, 2001
Vol. 50, No. 5

Telephone 503/731-4024
Emergencies 503/731-4030
Fax 503/731-4798
cd.summary@state.or.us
www.oshd.org/cdpe/

Recommended Childhood Immunization Schedule

Approved by the Advisory Committee on Immunization Practices (ACIP), American Academy of Pediatrics (AAP), American Academy of Family Physicians (AAFP), not to mention the Oregon Health Division (OHD).

<table>
<thead>
<tr>
<th>age ▼ vaccine</th>
<th>birth</th>
<th>1 month</th>
<th>2 months</th>
<th>4 months</th>
<th>6 months</th>
<th>12 months</th>
<th>15 months</th>
<th>18 months</th>
<th>24 months</th>
<th>4–6 years</th>
<th>11–12 years</th>
<th>14–16 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>hepatitis B¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hep B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>diphtheria, tetanus, pertussis²</td>
<td>DTaP</td>
<td>DTaP</td>
<td>DTaP</td>
<td>DTaP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DTaP</td>
<td>Td</td>
<td></td>
</tr>
<tr>
<td>H. influenzae type b³</td>
<td>Hib</td>
<td>Hib</td>
<td>Hib</td>
<td>Hib</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IPV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>polio⁴</td>
<td>IPV</td>
<td>IPV</td>
<td>IPV</td>
<td>IPV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pneumococcal conjugate⁵</td>
<td>PCV</td>
<td>PCV</td>
<td>PCV</td>
<td>PCV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>measles, mumps, rubella⁶</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MMR</td>
<td>MMR</td>
<td></td>
</tr>
<tr>
<td>varicella⁷</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Var</td>
<td>Var</td>
<td></td>
</tr>
<tr>
<td>hepatitis A⁸</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>hep A</td>
<td></td>
</tr>
</tbody>
</table>

The grey bars indicate preferred age ranges for certain vaccine doses. Catch-up immunizations should be done during any visit when feasible. Shaded ovals indicate vaccines to be assessed and given if necessary during the early adolescent visit.

The footnotes, printed on the back, are critical to a full understanding of the beauty of the Grand Immunization Plan.

REFERENCES
If you need this material in an alternate format, call us at 503/731-4024.

Meningococcal Disease in Oregon

Recent highly publicized cases of meningococcal disease have stimulated widespread concern. Although Oregon’s meningococcal disease rates are somewhat higher than the national average, they have been declining steadily since 1994. Seventy (70) cases were reported in Oregon in 2000 (about 2.1 per 100,000 residents), down 50% since the 1994 rate of 4.4 per 100,000. Among Oregon college students, meningococcal disease is even more rare: 8 cases between 1993–2000 translate to about 0.9 cases per 100,000 college students per year—less than the statewide average of 3.2 per 100,000 during that same period.

Meningococcal disease caused by the A, C, Y and W-135 serogroups of Neisseria meningitidis are vaccine-preventable. The meningococcal vaccine is not effective against serogroup B, the serogroup responsible in 2000 for 50 of the 70 cases in Oregon (and 5 of the 8 cases that occurred among college students during the past eight years). The cost of vaccine is high—about $70 per dose. College freshmen who want to reduce their already low risk can consider getting meningococcal vaccine if they think it is worth the cost.

Meningococcal disease is serious and can be fatal, but 90%–95% of the people who contract it recover after receiving appropriate antibiotic therapy. Because it is not highly contagious, post-exposure antibiotics are just recommended for close contacts of cases such as household members and perhaps a few close (very close) friends. School classmates, those living in other dormitory rooms, and health-care workers attending a case are generally not at higher risk. Remember to report cases to the local health department; officials there are experienced in applying standard criteria to decide who does and doesn’t need prophylaxis against the meningococcus. See our meningococcal disease home page and fact sheet: www.oshd.org/acd/nmenin/home.htm.

Footnotes to ACIP Immunization Schedule 2001

This schedule indicates the recommended ages for routine administration of licensed childhood vaccines. Doses not given at the recommended age can be given as a “catch-up” vaccination at any subsequent visit when indicated and feasible. Licensed combination vaccines may be used whenever any components of the combination are indicated and the vaccine’s other components are not contraindicated. Consult the manufacturers’ package inserts for detailed recommendations.

1. Infants born to HBsAg-negative mothers should receive the first dose of hepatitis B vaccine (Hep B) by age 2 months. The second dose should be administered at least 1 month after the first dose. The third dose should be administered at least 4 months after the first dose, but not before age 6 months. Infants born to HBsAg-positive mothers should receive Hep B and 0.5 ml hepatitis B immune globulin (HBIG) within 12 hours of birth at separate sites. The second dose is recommended at age 1–2 months and the third dose at age 6 months. Infants born to mothers whose HBsAg status is unknown should receive Hep B within 12 hours of birth. Maternal blood should be drawn at delivery to determine the mother’s HBsAg status; if the HBsAg test is positive, the infant should receive HBIG as soon as possible (no later than 1 week). All children and adolescents (through age 18 years) who have not been vaccinated against hepatitis B may begin the series during any visit. Providers should make special efforts to vaccinate children who were born in or whose parents were born in areas of the world where hepatitis B virus infection is moderately or highly endemic.

2. The fourth dose of diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP) can be administered as early as age 12 months, provided 6 months have elapsed since the third dose and the child is unlikely to return at age 15–18 months. Tetanus and diphtheria toxoids (Td) is recommended at age 11–12 years if at least 5 years have elapsed since the last dose of diphtheria and tetanus toxoids and pertussis vaccine (DTP), DTaP, or diphtheria and tetanus toxoids (DT). Subsequent routine Td boosters are recommended every 10 years.

3. Three type b (Hib) conjugate vaccines are licensed for infant use. If Hib conjugate vaccine (PRP-OmP) (PedvaxHIB ® or ComVax ® [Merck]) is administered at ages 2 months and 4 months, a dose at age 6 months is not required. Because clinical studies in infants have demonstrated that using some combination products may induce a lower immune response to the Hib vaccine component, DTaP/Hib combination products should not be used for primary vaccination in infants at ages 2, 4, or 6 months unless approved by the FDA for these ages.

4. An all-inactivated poliovirus vaccine (IPV) schedule is recommended for routine childhood polio vaccination in the United States. All children should receive four doses of IPV at age 2 months, age 4 months, ages 4 and 6 years, and at age 24–59 months.

5. The heptavalent pneumococcal conjugate vaccine (PCV) is recommended for all children age 2–23 months. It is also recommended for certain children age 24–59 months.

6. The second dose of measles, mumps, and rubella vaccine (MMR) is recommended routinely at age 4–6 years (for kindergarten in Oregon) but may be administered during any visit, provided at least 4 weeks have elapsed since receipt of the first dose and that both doses are administered beginning at or after age 12 months. Those who previously have not received the second dose should complete the schedule no later than the routine visit to a health-care provider at age 11–12 years.

7. Varicella (Var) vaccine is recommended at any visit on or after the first birthday for susceptible children, i.e., those who lack a reliable history of chickenpox (as judged by a health-care provider) and who have not been vaccinated. Susceptible persons aged 13 years should receive two doses given at least 4 weeks apart.

8. Hepatitis A vaccine (Hep A) is recommended for use in selected states and regions, including Oregon.