

# Recommended Immunization Schedule, Minnesota 2011

## Ages 0–6 Years

Chart must be used with guidelines below.

Vaccine ↓	Age →	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19-23 months	2-3 years	4-6 years
Hepatitis B <sup>1</sup>		HepB	HepB	see footnote 1	HepB							
Rotavirus <sup>2</sup>			RV	RV	RV <sup>2</sup>							
Diphtheria, Tetanus, Pertussis <sup>3</sup>			DTaP	DTaP	DTaP	see footnote 3	DTaP					DTaP
Haemophilus influenzae type b <sup>4</sup>			Hib	Hib	Hib <sup>4</sup>	Hib						
Pneumococcal <sup>5</sup>			PCV	PCV	PCV	PCV	Supplemental PCV13				PPSV	
Inactivated Poliovirus <sup>6</sup>			IPV	IPV	IPV							IPV
Influenza <sup>7</sup>						TIV (annually)					TIV or LAIV	
Measles, Mumps, Rubella <sup>8</sup>						MMR						MMR
Varicella <sup>9</sup>						VAR						VAR
Hepatitis A <sup>10</sup>						HepA series					HepA series	
Meningococcal <sup>11</sup>												MCV

Range of recommended ages  
 Catch-up vaccination  
 Certain high-risk groups

- Additional vaccines may be licensed and recommended during the year. For updated information see [www.cdc.gov/vaccines/pubs/ACIP-list.htm](http://www.cdc.gov/vaccines/pubs/ACIP-list.htm).
- Licensed combination vaccines may be used whenever any components of the combination are indicated and other components of the vaccine are not contraindicated and if approved by the Food and Drug Administration for that dose of the series. Also consider provider assessment, patient preference, and potential for adverse events.
- Consult the respective ACIP statement for detailed recommendations.
- Report clinically significant adverse events that follow immunization to the Vaccine Adverse Event Reporting System (VAERS). For guidance on how to obtain and complete a VAERS form see <http://vaers.hhs.gov/index> or call 800-822-7967.

### 1. Hepatitis B (HepB). Minimum age: birth.

#### At birth:

- Give monovalent HepB to all newborns within 12 hours of birth.
- If mother is HBsAg positive, give newborn HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth.
- If mother's HBsAg status is unknown, give newborn HepB within 12 hours of birth. Determine mother's HBsAg status as soon as possible and if HBsAg positive, give newborn HBIG as soon as possible and within 1 week.

#### Following the birth dose:

- Complete HepB series with either monovalent HepB or a combination vaccine containing HepB. Give second dose at age 1 or 2 months and final dose no sooner than age 24 weeks. Note: Combination vaccines are not indicated before age 6 weeks. It is permissible to give 4 doses of HepB when combination vaccines are given after the birth dose.
- Infants that didn't receive a birth dose should receive HepB on a schedule of 0, 1, and 6 months.
- Test infants born to HBsAg positive mothers for HBsAg and antibody to HBsAg after completion of 3 or more doses in HepB series, at age 9 through 18 months (generally at the next well-child visit).

#### 4-month dose:

- If monovalent HepB is used for doses after the birth dose, a dose at age 4 months is not needed.

### 2. Rotavirus (RV). Minimum age: 6 weeks.

- Give first dose at age 6 through 14 weeks. Do not start the series at age 15 weeks and older.
- Give final dose by age 8 months. Do not give a dose at age 8 months and older.
- If Rotateq was used for either of the first 2 doses, give a total of 3 doses.
- Rotarix only requires 2 doses at 2 months and 4 months.

### 3. Diphtheria, tetanus, and acellular pertussis (DTaP). Minimum age: 6 weeks.

- Fourth dose may be given as early as age 12 months, provided at least 6 months have elapsed since third dose.
- Give final dose at age 4 through 6 years.

### 4. Haemophilus influenzae type b (Hib). Minimum age: 6 weeks.

- If PRP-OMP (PedvaxHIB or ComVax) is given at age 2 and 4 months, a dose at age 6 months is not necessary.
- Hiberix should not be used for doses at age 2, 4, or 6 months but can be used as a booster following any Hib vaccine in children age 12 months and older.
- Not routinely recommended for persons age 5 years and older; however, consider 1 dose for unvaccinated children with sickle cell disease, leukemia, or HIV infection, or who have had a splenectomy.

### 5. Pneumococcal (PCV, PPSV). Minimum ages: 6 weeks for pneumococcal conjugate vaccine (PCV); 2 years for pneumococcal polysaccharide vaccine (PPSV).

#### Pneumococcal conjugate vaccine (PCV)

- Give 1 dose of PCV to any unvaccinated child age 2 through 4 years. If they are at risk for invasive disease give a second dose 2 months after first dose.
- Give PCV13 to complete any series started with PCV7.

- Provide a single supplemental dose of PCV13 following a completed PCV7 series for:
  - Healthy children through age 4 years,
  - Children with certain medical conditions through age 5 years.

- Allow 8 weeks between pneumococcal vaccine doses.
- Consider a single supplemental dose of PCV13 for children age 6 through 18 years with anatomic or functional asplenia including sickle cell disease, immunocompromising conditions including HIV infection, cochlear implant, or CSF leaks.

#### Pneumococcal polysaccharide vaccine (PPSV)

- Give PPSV to certain high-risk groups age 2 years and older. See MMWR 2000; 49(RR-9):1-35.
- A single revaccination is recommended 5 years after initial dose for children age 2 years and older with anatomic or functional asplenia or immunocompromising conditions.

### 6. Inactivated poliovirus (IPV). Minimum age: 6 weeks.

- Always give final dose between age 4 through 6 years, regardless of the number of doses previously given.
- Give final dose at least 6 months after previous dose.

### 7. Influenza, seasonal (TIV, LAIV). Minimum ages: 6 months for trivalent inactivated influenza vaccine (TIV); 2 years for live, attenuated influenza vaccine (LAIV).

- Give annually to all children: TIV for age 6 months through 2 years and TIV or LAIV for healthy children age 2 through 18 years.
- Give 2 doses separated by at least 4 weeks to children younger than age 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time last season and only received 1 dose.

### 8. Measles, mumps, and rubella (MMR). Minimum age: 12 months.

- Give first dose on or after first birthday.
- Give second dose at age 4 through 6 years. It may be given earlier provided at least 4 weeks have elapsed since first dose.

### 9. Varicella (VAR). Minimum age: 12 months.

- Give first dose on or after first birthday.
- Give second dose at age 4 through 6 years. It may be given earlier provided that at least 3 months have elapsed since first dose. If second dose was given at least 28 days after the first dose, it does not need to be repeated.

### 10. Hepatitis A (HepA). Minimum age: 12 months.

- Give 2 doses at least 6 months apart to all children at age 1 year. If not fully vaccinated by age 2 years child can be vaccinated at a subsequent visit.
- Consider catch-up vaccination for children through age 18 years.

### 11. Meningococcal conjugate vaccine (MCV). Minimum age: 2 years.

- Give 2 doses 2 months apart to children age 2 years and older with persistent complement component deficiency, anatomic or functional asplenia, or HIV infection and 1 dose every 5 years thereafter.
- Give 1 dose of MCV to children through age 6 years who received meningococcal polysaccharide vaccine (MPSV) or MCV three or more years previously and who remain at risk (i.e., travel to endemic areas).