Immunizations Update:

Kimberly Pierson, RN

Current Trends in Pediatric and Adolescent Health Conference
March 5, 2010
A **vaccine** tricks the body’s immune system into producing **antibodies** to fight a form of the **virus** that is not harmful. Then, if the person ever encounters the real and dangerous virus, the body is ready to prevent it from harming any cells.
Advisory Committee on Immunization Practices (ACIP)

Provides advice and guidance on effective control of vaccine-preventable diseases in the U.S. civilian population.

Develops written recommendations for routine administration of vaccines to the pediatric and adult populations, along with vaccination schedules regarding appropriate periodicity, dosage, and contraindications.

Published by the Centers for Disease Control and Prevention.
VACCINES
Build your child's health

Love them. Protect them.
Immunize them.
Success

Texas improved 13.5 percentage points since 2004 - the best improvement in the nation. It took a tremendous effort to make this happen, and it is nice to receive recognition for that hard work.
Strategies for High Immunization Levels

- Recordkeeping
- Recommendations and reinforcement
- Reminder and recall to patients
- Reminder and recall to providers
- Reduction of missed opportunities
- Reduction of barriers to immunization
Recommending the vaccine

- Powerful motivator
- Patients likely to follow recommendation of the provider
- Reinforce the need to return
  - Verbal
  - Written
- Link to calendar event
Records

- Must be available at the time of the visit
- Must be easy to read
- Must be accurate
  - Reflect current patient population
  - Reflect all vaccines given
Immunization Registries

- Single data source for all providers
- Reliable immunization history
- Produce records for patient use
- Key to increasing immunization levels
Developed by the Texas Department of State Health Services (DSHS).

Free, confidential registry designed to consolidate immunization records from multiple providers.

Offers physicians and other healthcare providers easy online access to a child’s immunization history.

Part of a DSHS initiative to increase vaccination coverage for children across Texas.

Parents may request their child's ImmTrac record from their physician or their local health department.
When there's no time to think about your vaccines — you won’t have to.
Texas Vaccines for Children

- Legislation that guarantees vaccines available at no cost to providers, in order to immunize children from birth – 18 yrs who meet eligibility requirements.

- Providers can charge an administration fee, but there is a cap according to the legislature.

- Medicaid
- No health insurance
- American Indian
- Alaskan Native
- Enrolled in CHIP
- Underinsured
  - vaccines not covered
  - unable to meet co-pay
Principles of Vaccination

**General Rule**

Increasing the interval between doses of a multidose vaccine does not diminish the effectiveness of the vaccine*

Decreasing the interval between doses of a multidose vaccine may interfere with antibody response and protection

*after the series has been completed
Violation of Minimum Intervals or Minimum Age

- ACIP recommends that vaccine doses given up to four days before the minimum interval or age be counted as valid.

- Immunization programs and/or school entry requirements may not accept all doses given earlier than the minimum age or interval.
Adverse Reaction vs Event

- Adverse reaction:
  - Extraneous effect *caused* by vaccine
  - Side effect

- Adverse event:
  - Any event following vaccination
  - May be true adverse reaction
  - May be only coincidental
Vaccine Adverse Reactions

Local
- pain, swelling, redness at site of injection
- common with inactivated vaccines
- usually mild and self-limited
Vaccine Adverse Reactions

- Systemic
  - fever, malaise, headache
  - nonspecific
  - may be unrelated to vaccine
- Allergic
  - due to vaccine or vaccine component
  - rare
  - risk minimized by screening
VAERS
Vaccine Adverse Event Reporting System

- National vaccine safety program
- Collects information about adverse events following administration of vaccines
- Identify potential patient risk factors for particular types of adverse events;
- Assess the safety of newly licensed vaccines
- Made available to the public
Contraindications and Precautions

- Contraindication:
  - A condition in a recipient that greatly increases the chance of a serious adverse reaction.

- Precaution:
  - A condition in a recipient that might increase the chance or severity of an adverse reaction, or
  - might compromise the ability of vaccine to produce immunity
Permanent Contraindications to Vaccination

- severe allergic reaction to a vaccine component or following a prior dose
- encephalopathy not due to another identifiable cause occurring within 7 days of pertussis vaccination
Invalid Contraindications to Vaccination

- Mild illness
- Antimicrobial therapy
- Disease exposure or convalescence
- Pregnant or immunosuppressed person in the household
- Breastfeeding
- Preterm birth
- Allergy to products not present in vaccine or allergy that is not anaphylactic
- Family history of adverse events
- Tuberculin skin testing
- Multiple vaccines
Screening Questions

- Is the child (or are you) sick today?
- Does the child have an allergy to any medication, food, or any vaccine?
- Has the child had a serious reaction to a vaccine in the past?
- Has the child had a seizure, brain or nerve problem?
- Does the child have cancer, leukemia, AIDS, or any other immune system problem?
Screening Questions

- Has the child taken cortisone, prednisone, other steroids, or anticancer drugs, or had x-ray treatments in the past 3 months?
- Has the child received a transfusion of blood or blood products, or been given a medicine called immune (gamma) globulin in the past year?
- Is the child/teen pregnant or is there a chance she could become pregnant during the next month?
- Has the child received vaccinations in the past 4 weeks?
Vaccination During Acute Illness

- No evidence that acute illness reduces vaccine efficacy or increases vaccine adverse reactions
- Vaccines should be delayed until the illness has improved
- Mild illness, such as otitis media or an upper respiratory infection, is NOT a contraindication to vaccination
Texas Administrative Code

TITLE 25
HEALTH SERVICES
PART 1
DEPARTMENT OF STATE HEALTH SERVICES
CHAPTER 97
COMMUNICABLE DISEASES
SUBCHAPTER B
IMMUNIZATION REQUIREMENTS IN TEXAS ELEMENTARY AND SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION

Rules

§97.61 Children and Students Included in Vaccine Requirements
§97.62 Exclusions from Compliance
§97.63 Immunization Requirements in Texas Elementary and Secondary Schools
§97.64 Required Vaccinations for Students Enrolled in Health-related and Veterinary Courses in Institutions of Higher Education
§97.65 Exceptions to Immunization Requirements (Verification of Immunity/History of Illness)
§97.66 Provisional Enrollment for (Non-Higher Education; Non-Veterinary) Students
§97.67 School Records
§97.68 Acceptable Evidence of Vaccination(s)
§97.69 Transfer of Immunization Records
§97.70 Review of Records and Providing Assistance
§97.71 Annual Report of Immunization Status of Students
§97.72 Additional Vaccination Requirements
Texas Administrative Code

TITLE 25
PART 1
CHAPTER 97
SUBCHAPTER B

HEALTH SERVICES
DEPARTMENT OF STATE HEALTH SERVICES
COMMUNICABLE DISEASES
IMMUNIZATION REQUIREMENTS IN TEXAS ELEMENTARY AND SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION

RULE §97.61 Children and Students Included in Vaccine Requirements

(a) The vaccine requirements apply to all children and students entering, attending, enrolling in, and/or transferring to child-care facilities or public or private primary or secondary schools or institutions of higher education.

(b) The vaccines required in this section are also required for all children in the State of Texas, including children admitted, detained, or committed in Texas Department of Criminal Justice, Department of State Health Services, and Texas Youth Commission facilities.

(c) The vaccine requirements are adopted as a statewide control measure for communicable disease as defined in Health and Safety Code, §81.081 and §81.082.

Source Note: The provisions of this §97.61 adopted to be effective April 1, 2004, 29 TexReg 3188; amended to be effective March 5, 2009, 34 TexReg 1433
Exclusions from compliance are allowable on an individual basis for medical contraindications, reasons of conscience, including a religious belief, and active duty with the armed forces of the United States. Children and students in these categories must submit evidence for exclusion from compliance as specified in the Health and Safety Code, §161.004(d), Health and Safety Code, §161.0041, Education Code, Chapter 38, Education Code, Chapter 51, and the Human Resources Code, Chapter 42.

(1) To claim an exclusion for medical reasons, the child or student must present a statement signed by the child's physician (M.D. or D.O.), duly registered and licensed to practice medicine in the United States who has examined the child, in which it is stated that, in the physician's opinion, the vaccine required is medically contraindicated or poses a significant risk to the health and well-being of the child or any member of the child's household. Unless it is written in the statement that a lifelong condition exists, the exemption statement is valid for only one year from the date signed by the physician.

(2) To claim an exclusion for reasons of conscience, including a religious belief, a signed affidavit must be presented by the child’s parent or legal guardian, stating that the child’s parent or legal guardian declines vaccinations for reasons of conscience, including because of the person’s religious beliefs. The affidavit will be valid for a two-year period. The child, who has not received the required immunizations for reasons of conscience, including religious beliefs, may be excluded from school in times of emergency or epidemic declared by the commissioner of public health.

(A) A person claiming exclusion for reasons of conscience, including a religious belief, from a required immunization may only obtain the affidavit form by submitting a written request to the department. The request must include the following:
Rule 97.62
Exclusion from Compliance

- Medical contraindications
- Reason of conscience, religious belief
- Active duty in the military
Number of Conscientious Exemptions Reported by Schools

Independent School Districts and Accredited Private Schools Reporting Conscientious Exemptions by County, School Year 2007-08

Legend:
- 0
- 1 - 126
- 127 - 265
- 266 - 659
- 660 - 1194
- No Data

Disclaimer: This data is self-reported and may vary from year to year.

Data Source: Annual School report of Immunization Status, School Year 2007-08

DSHS, Immunization Branch

Map Created by: DSHS Center for Health Statistics
Every child in the state shall be vaccinated against vaccine-preventable diseases caused by infectious agents, in accordance with the following immunization schedule.

(1) A vaccine administered up to four days prior to the deadline for that vaccine in the department Immunization Schedule, §97.221 of this title (relating to Department of State Health Services Immunization Schedule) and in the schedules in this section, are considered compliant with that deadline.

(2) For diseases listed below, a child or student shall show acceptable evidence of vaccination prior to entry, attendance, or transfer to a child-care facility or public or private elementary or secondary school.

(A) Children enrolled in child-care facilities, pre-kindergarten, or early childhood programs shall have the following immunizations (at the ages indicated) against: diphtheria, pertussis, tetanus, poliomyelitis, Haemophilus influenzae type b (Hib), measles, mumps, rubella, hepatitis B, hepatitis A, invasive pneumococcal, and varicella diseases in accordance with the department Immunization Schedule, §97.221 of this title. A copy of the current schedule is available at www.ImmunizeTexas.com or by mail to the Department of State Health Services, P.O. Box 149347, Austin, Texas 78714-9347.

(B) Students in kindergarten through twelfth grade shall have the following vaccines, according to the schedule listed.

(i) Poliomyelitis.

(i) Kindergarten entry. Students are required to have four doses of polio vaccine—one of which must have been received on or after the fourth birthday. Or, if the third dose was administered on or after the fourth birthday, only three doses are required. Four doses of oral polio vaccine (OPV) or inactivated poliovirus vaccine (IPV) in any combination by age four to six years old is considered a complete series, regardless of age at the time of the third dose.
Rule 97.63
Immunization Requirements in Texas Elementary and Secondary Schools

- New amendments into Administrative code
- Adopted March 5, 2009, beginning school year ‘09-10
- Phase-in for all Kindergarten and 7th graders
Kindergarten Requirements

- Varicella – 2nd dose
- MMR – 2nd dose
- Hepatitis A – two dose series
7th grade requirements

- Meningococcal - MCV4
- Varicella – two doses
- Tdap – booster dose with acellular pertussis component
### 1983 Recommended Immunization Schedule

<table>
<thead>
<tr>
<th>Recommended age*</th>
<th>Vaccine(s)†</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 mo.</td>
<td>DTP-1,§ OPV-1§</td>
<td>Can be given earlier in areas of high endemico</td>
</tr>
<tr>
<td>4 mo.</td>
<td>DTP-2, OPV-2</td>
<td>6-wks-2-mo. interval desired between OPV doses to avoid interference</td>
</tr>
<tr>
<td>6 mo.</td>
<td>DTP-3</td>
<td>An additional dose of OPV at this time is optional for use in areas with a high risk of polio exposure</td>
</tr>
<tr>
<td>15 mo.**</td>
<td>MMR††</td>
<td>Completion of primary series</td>
</tr>
<tr>
<td>18 mo.**</td>
<td>DTP-4, OPV-3</td>
<td></td>
</tr>
<tr>
<td>4-6 yr.§§</td>
<td>DTP-5, OPV-4</td>
<td>Preferably at or before school entry</td>
</tr>
<tr>
<td>14-16 yr.†††</td>
<td>Td†††</td>
<td>Repeat every 10 years throughout life</td>
</tr>
</tbody>
</table>

*These recommended ages should not be construed as absolute, i.e. 2 mos. can be 6-10 weeks, etc.
†††For all products used, consult manufacturer’s package enclosure for instructions for storage, handling, and administration. Immunobiologics prepared by different manufacturers may vary, and those of the same manufacturer may change from time to time. The package insert should be followed for a specific product.
§§§DTP—Diphtheria and tetanus toxoids and pertussis vaccine.
§§§§OPV—Oral, attenuated poliovirus vaccine contains poliovirus types 1, 2, and 3.
Simultaneous administration of MMR, DTP, and OPV is appropriate for patients whose compliance with medical care recommendations cannot be assured.
††††MMR—Live measles, mumps, and rubella viruses in a combined vaccine (see text for discussion of single vaccines versus combination).
§§§§§Up to the seventh birthday.
†††††Td—Adult tetanus toxoid and diphtheria toxoid in combination, which contains the same dose of tetanus toxoid as DTP or DT and a reduced dose of diphtheria toxoid.
# When Do Children and Teens Need Vaccinations?

<table>
<thead>
<tr>
<th>Age</th>
<th>HepB&lt;sup&gt;1&lt;/sup&gt;</th>
<th>DTaP/Tdap</th>
<th>Hib&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Polio&lt;sup&gt;3&lt;/sup&gt;</th>
<th>PCV&lt;sup&gt;4&lt;/sup&gt;</th>
<th>RV&lt;sup&gt;5&lt;/sup&gt;</th>
<th>MMR&lt;sup&gt;6&lt;/sup&gt;</th>
<th>Varicella</th>
<th>HepA&lt;sup&gt;7&lt;/sup&gt;</th>
<th>HPV&lt;sup&gt;8&lt;/sup&gt;</th>
<th>MCV4&lt;sup&gt;9&lt;/sup&gt;</th>
<th>Influenza&lt;sup&gt;10&lt;/sup&gt;</th>
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<tr>
<td>Birth</td>
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<td>6 months</td>
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<tr>
<td>12 months</td>
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<td>✓&lt;sup&gt;3&lt;/sup&gt;</td>
<td>✓&lt;sup&gt;4&lt;/sup&gt;</td>
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<tr>
<td>15 months</td>
<td>✓&lt;sup&gt;5&lt;/sup&gt;</td>
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<td>(12-15 mos)</td>
<td>✓&lt;sup&gt;6&lt;/sup&gt;</td>
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<td>18 months</td>
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<td>(6-18 mos)</td>
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<td>19-23 months</td>
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<td>Catch-up&lt;sup&gt;9&lt;/sup&gt;</td>
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<td>Catch-up&lt;sup&gt;9&lt;/sup&gt;</td>
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<td>4-6 years</td>
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<td>Catch-up&lt;sup&gt;9&lt;/sup&gt;</td>
<td>Catch-up&lt;sup&gt;9&lt;/sup&gt;</td>
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<td>Catch-up&lt;sup&gt;9&lt;/sup&gt;</td>
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<tr>
<td>7-10 years</td>
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<td>11-12 years</td>
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<td>13-18 years</td>
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</tbody>
</table>

1. Your infant may not need a dose of HepB at age 4 months depending on the type of vaccine that your healthcare provider uses.
2. Your infant may not need a dose of Hib vaccine or RV vaccine at age 6 months depending on the type of vaccine that your healthcare provider uses.
3. One dose is recommended for most people. Children younger than age 9 years who are receiving influenza vaccine for the first time, or who received only 1 dose in the previous season (if it was their first vaccination season), should receive 2 doses spaced at least 4 weeks apart this season.
4. This dose of DTaP may be given as early as age 12 months if it has been 6 months since the previous dose.
5. If your child’s vaccinations are delayed or missed entirely, they should be given as soon as possible.
6. All girls and women age 11 through 26 years should be vaccinated with 3 doses of HPV vaccine, given over a 6-month period. Boys and men age 11 through 26 years may also be vaccinated with one of the HPV vaccines (Gardasil) to reduce their likelihood of getting genital warts. The vaccine may be given to children as young as age 9 years.
7. If you have a teenager who is enrolling in college and planning to live in a dormitory and who hasn’t previously been vaccinated against meningococcal disease, they should be vaccinated now.

**Please note:** Some children may need additional vaccines. Talk to your healthcare provider.

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Technical content reviewed by the Centers for Disease Control and Prevention, January 2010

Immunization Action Coalition • 1573 Selby Avenue, Suite 234 • Saint Paul, MN 55104 • (651) 647-9009 • www.vaccineinformation.org • www.immunize.org
### Recommended Immunization Schedule for Persons Aged 0 Through 6 Years—United States • 2010

For those who fall behind or start late, see the catch-up schedule

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Age</th>
<th>Birth</th>
<th>1 month</th>
<th>2 months</th>
<th>4 months</th>
<th>6 months</th>
<th>12 months</th>
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<th>18 months</th>
<th>19–23 months</th>
<th>2–3 years</th>
<th>4–6 years</th>
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<td>Hepatitis B</td>
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<td>Diphtheria, Tetanus, Pertussis</td>
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<td>DTaP</td>
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<td>Inactivated Poliovirus</td>
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<td>Influenza</td>
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<td>Measles, Mumps, Rubella</td>
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<td>MMR</td>
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<td>Varicella</td>
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<td>Varicella</td>
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<td>Hepatitis A</td>
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<td>HepA (2 doses)</td>
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<td>MCV</td>
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</table>

Range of recommended ages for all children except certain high-risk groups

Range of recommended ages for certain high-risk groups

*Note: See footnotes for additional information.*
# Recommended Immunization Schedule for Persons Aged 7 Through 18 Years—United States • 2010

For those who fall behind or start late, see the schedule below and the catch-up schedule

<table>
<thead>
<tr>
<th>Vaccine ▼</th>
<th>Age ▼</th>
<th>7–10 years</th>
<th>11–12 years</th>
<th>13–18 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetanus, Diphtheria, Pertussis⁴</td>
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<td>Tdap</td>
<td>Tdap</td>
<td></td>
</tr>
<tr>
<td>Human Papillomavirus²</td>
<td>see footnote 2</td>
<td>HPV (3 doses)</td>
<td>HPV series</td>
<td></td>
</tr>
<tr>
<td>Meningococcal³</td>
<td></td>
<td>MCV</td>
<td>MCV</td>
<td>MCV</td>
</tr>
<tr>
<td>Influenza⁴</td>
<td></td>
<td>Influenza (Yearly)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal⁵</td>
<td></td>
<td></td>
<td>PPSV</td>
<td></td>
</tr>
<tr>
<td>Hepatitis A⁶</td>
<td></td>
<td></td>
<td>HepA Series</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B⁷</td>
<td></td>
<td></td>
<td>Hep B Series</td>
<td></td>
</tr>
<tr>
<td>Inactivated Poliovirus⁸</td>
<td></td>
<td></td>
<td>IPV Series</td>
<td></td>
</tr>
<tr>
<td>Measles, Mumps, Rubella⁹</td>
<td></td>
<td></td>
<td>MMR Series</td>
<td></td>
</tr>
<tr>
<td>Varicella¹⁰</td>
<td></td>
<td></td>
<td>Varicella Series</td>
<td></td>
</tr>
</tbody>
</table>
The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age.

### PERSONS AGED 4 MONTHS THROUGH 6 YEARS

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Minimum Age for Dose 1</th>
<th>Dose 1 to Dose 2</th>
<th>Minimum Interval Between Doses</th>
<th>Dose 2 to Dose 3</th>
<th>Dose 3 to Dose 4</th>
<th>Dose 4 to Dose 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Birth</td>
<td>4 weeks</td>
<td>8 weeks (and at least 16 weeks after first dose)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rotavirus&lt;sup&gt;2&lt;/sup&gt;</td>
<td>6 wks</td>
<td>4 weeks</td>
<td>4 weeks&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diphtheria, Tetanus, Pertussis&lt;sup&gt;3&lt;/sup&gt;</td>
<td>6 wks</td>
<td>4 weeks</td>
<td>4 weeks&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haemophilus influenzae type b&lt;sup&gt;4&lt;/sup&gt;</td>
<td>6 wks</td>
<td>4 weeks</td>
<td>4 weeks&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal&lt;sup&gt;5&lt;/sup&gt;</td>
<td>6 wks</td>
<td>4 weeks</td>
<td>4 weeks&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles, Mumps, Rubella&lt;sup&gt;7&lt;/sup&gt;</td>
<td>12 mos</td>
<td>3 months</td>
<td>4 weeks&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella&lt;sup&gt;6&lt;/sup&gt;</td>
<td>12 mos</td>
<td>6 months</td>
<td>4 weeks</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PERSONS AGED 7 THROUGH 18 YEARS

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Minimum Age for Dose 1</th>
<th>Dose 1 to Dose 2</th>
<th>Minimum Interval Between Doses</th>
<th>Dose 2 to Dose 3</th>
<th>Dose 3 to Dose 4</th>
<th>Dose 4 to Dose 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetanus, Diphtheria, Tetanus, Diphtheria, Pertussis&lt;sup&gt;6&lt;/sup&gt;</td>
<td>7 yrs&lt;sup&gt;6&lt;/sup&gt;</td>
<td>4 weeks</td>
<td>4 weeks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Papillomavirus&lt;sup&gt;11&lt;/sup&gt;</td>
<td>9 yrs</td>
<td>4 weeks</td>
<td>6 months if first dose administered at younger than age 12 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A&lt;sup&gt;10&lt;/sup&gt;</td>
<td>12 mos</td>
<td>6 months</td>
<td>8 weeks&lt;sup&gt;8&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Birth</td>
<td>4 weeks</td>
<td>(and at least 16 weeks after first dose)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inactivated Poliovirus&lt;sup&gt;6&lt;/sup&gt;</td>
<td>6 wks</td>
<td>4 weeks</td>
<td>4 weeks&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles, Mumps, Rubella&lt;sup&gt;7&lt;/sup&gt;</td>
<td>12 mos</td>
<td>3 months</td>
<td>4 weeks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella&lt;sup&gt;6&lt;/sup&gt;</td>
<td>12 mos</td>
<td>4 weeks</td>
<td>3 months</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Get It For Them!

One out of every five children in Texas does not have the 4th dose of the DTaP vaccine.

The Texas Department of State Health Services is asking all healthcare providers to ensure all children receive their vaccines on time, every time, including the 4th DTaP at 15 to 18 months of age.

Assess. Check every child’s vaccination record at every visit, including sick visits.

Vacinate. Administer all vaccines due at the time of every visit, including sick visits, unless medically contraindicated.

Document. Report all vaccines administered at every visit to the Texas Immunization Registry, ImmTrac.

Every Vaccine Counts!

Call 1-800-252-9152 or visit www.ImmunizeTexas.com
Meningococcal Disease

- Bacteria neisseria meningitis
- Person to person through respiratory secretions
- Symptoms – high fever, chills, lethargy, rash, headache, neck stiffness, confusion
- Diagnosed by spinal fluid, blood cultures
- Very serious - shock, coma, death can occur within just a few hours
- 12% die even with appropriate antibiotic treatment; 20% have long term effects – hearing loss, brain damage, and loss of limbs
- Risk – infants, travelers where it’s common, underlying medical conditions, crowded housing
Meningitis

http://www.voicesofmeningitis.org/
Meningococcal Vaccine

- First licensed in 1974
- 2005 MCV4, ages 2 – 55, offering better, longer-lasting protection
- Recommended for all children and teens 11-18 yrs, as well as people at increased risk:
  - College freshmen, asplenia, certain underlying conditions, travelers, exposure, lab workers
- Adverse reactions: local reaction, fever, systemic (headache, malaise, fatigue)
- Contraindications: severe allergic reaction, moderate or severe acute illness
Rotavirus

- Extremely contagious virus, very stable in environment, living for weeks and months
- Spread fecal-oral route, mostly in children; common in daycares and hospitals
- Causes fever, vomiting, and severe diarrhea, lasting 3-7 days
- Can lead to dehydration, electrolyte imbalance, and metabolic acidosis
- Easy and inexpensive to diagnose by stool specimen
Rotavirus Vaccine

- 90-98% effective against severe disease
- Rotateq available in 2006 - 3 dose series
- Rotarix available in 2008 - 2 dose series
- Two licensed vaccines, both live, taken orally
- Side effects – vomiting, diarrhea, irritability, fever
- Contraindication: severe allergic reaction following previous dose, allergy to latex
- Precaution: altered immunocompetence, gastroenteritis or other acute illness, hx of intussusception
HPV (human papillomavirus)
Human Papillomavirus - HPV

- Most common STD infection in the U.S.
- 50% sexually active acquire HPV infection in the lifetime
- Most people have no symptoms, and it eventually goes away OR they may transmit the virus unintentionally to a sex partner
- Can cause genital warts
- Persistent HPV infection is associated with almost all cervical cancers and causes over 230,000 deaths each year
HPV Vaccine

- Available in 2006
- 2 types Gardasil (quadrivalent), and Cervarix (bilvalent), both are 3 shot series
- Gardasil licensed, safe, and effective for females ages 9-26
- Also for males, but not on ACIP
- CDC recommends girls ages 11-12
  - Before sexual activity begins
  - Pre-teen health check up
  - Along with other scheduled vaccines
Human Papillomavirus - HPV

- Adverse reactions: local (pain, swelling), fever, system reactions (nausea, dizziness, myalgia, malaise) equal to with placebo, no serious adverse reactions
- Contraindication: severe allergic reaction
- Precaution: moderate to severe acute illness
- Syncope reported among adolescents who received any vaccines
  - should always be seated
  - Consider observing for 15-20 minutes
H1N1 – The Facts!!!

As of January 16, 2010
- 57 million cases
- 257,000 hospitalizations
- 11,690 deaths
- 85-90% are people younger than 65 yrs
- Flu season is not over yet... flu season peaks in February and March

As of February 26, 2010
- 329 laboratory-confirmed pediatric deaths (278 confirmed H1N1, 49 influenza A, but the flu virus subtype was not determined)
- 2 pediatric deaths were associated with seasonal influenza viruses
STOPPING THE FLU IS UP TO YOU.
References/Links

- http://www.vaccineinformation.org/
- http://www.dshs.state.tx.us/default.shtm
- http://www.cdc.gov
- dshs.state.tx.us/immunize/default.shtm
- cdc.gov/nip/isd/shtoolkit/splash.html
- http://immunizetexas.com/
- www.vaers.hhs.gov
- http://www.dshs.state.tx.us/immunize/tvfc/default.shtm
- http://www.voicesofmeningitis.org/
Contact Information

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HSR-1 Immunization Educator

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