COMPLETE CHILDREN'S HEALTH

To our New Patients,

We welcome you and your family to Lincoln's most innovative pediatric practice. Established in August, 1995, Complete Children's Health is dedicated to the care of well and sick children in family-friendly, cost-effective way. We believe the care of children is best accomplished as a partnership between parents and care providers. Therefore, we believe you can have certain expectations of us, and we, in turn, can provide the service and quality care you deserve.

We encourage you to read this information thoroughly and ask us any questions you may have. We will work with you to provide information and educate you about each stage of your child's growth and development, required immunizations and other health related concerns. We follow the American Academy of Pediatrics guidelines for well child physicals. See the attached Well Child and Adolescent Care Schedule for these guidelines.

Please call (402) 465-5600 to schedule a well child visit for your child. You will be asked to complete a past medical history form and current age questionnaire. You may print these forms from our website www.completechildrenshealth.com and bring these forms to our office at the time of your visit.

A copy of your child's immunization history, plus medical records from your previous physician are helpful in providing consistent health care to your child. You may make this request at your previous physician's office, or you can use our Authorization to Release Information to Complete Children's Health form. After your child has completed a well child visit, we can see them for urgent care visits, including extended hours and weekend appointments.

Phone Hours

8:00 am	-	5:00 pm	Monday – Friday
8:30 am	-	3:30 pm	Saturday
12:00 pm	-	3:30 pm	Sunday

When our office is closed, please call (402) 219-7777, "Telephone Line to Care", for our after-hours nurse advice and triage service.

If you have questions regarding billing or insurance, please call (402) 327-6010.

Services We Provide

Prenatal Counseling
Newborn Care
Lactation Consulting
Well Child Checks
Car Seat Checks
CCH Psychology Services
School, Sports and Camp Physicals
Growth, Development and Nutrition Counseling
Parenting Resources
Casting of Simple Fractures
Minor Laceration Repair
ADD/ADHD Visits
Asthma Clinic
Behavior Clinic
Dry Nights Clinic
Fussy Baby Clinic
Pediatric Hospitalist

With your help, we can better serve your needs.

If Your Child is Sick or Injured
If your child's illness is life threatening or the injury is major, call 911. Ask the Emergency Room to contact your child's doctor to discuss their illness or injury.

If your child is sick or has a minor (non-life threatening) injury, call our office at (402) 465-5600 during normal business hours. When our office is closed, please call (402) 219-7777, "Telephone Line to Care", for our after-hours nurse advice and triage service.

Always Call for an Appointment
If you call ahead rather than walk in, we can minimize your wait. This also helps reduce waiting room congestion and the exposure of well children to sick children.

Be On Time for Your Appointment
We believe your time is valuable, and we strive to see you and your child at the scheduled time. If you are late for a well child appointment, we will ask you to reschedule your appointment. There may be times when we are running behind schedule due to minor emergencies.

Call Us if You Must Cancel Your Appointment
Please call our office in advance if you are unable to keep a scheduled appointment. Your cooperation allows us to use this time to see a sick child.

Make Note of Where Your Appointment is Scheduled
Some of our providers rotate between offices, so our schedulers will give you not only the date and time for your appointment, but the location as well. It is important for you to make note of the correct location.

Direct Your Telephone Questions to Our Nurses.
Our nursing staff is trained to handle routine questions. If your physician's involvement is necessary, the nurse will discuss your questions with the physician between patient examinations and call you back with their instructions. This allows a quick response to your questions. All calls to our nurse line will be returned the same day. If the nurse determines your provider needs to speak to you, he/she will return your call over the lunch hour or at the end of the day. Calls are processed in this way to keep our providers on time for scheduled appointments.

For after-hours triage nurse service, call Telephone Line To Care
If your child is sick or injured after hours, call TLC at (402) 219-7777. Please hold calls that do not involve an immediate concern until regular business hours.

Telephone Visits
Complete Children's Health is committed to providing our patients access to quality care. In addition to usual weekday and weekend clinic hours, we also offer 24 hour telephone visits for your urgent medical problems. This service is provided by specially trained registered nurses working in cooperation with your child's physician. Since physician and/or nurse time for these services is significant, we charge a small fee for telephone care provided in place of an office visit. Please do not hesitate to make necessary phone calls to us for medical advice. In many situations, a simple call to the office can answer a medical question or help with home care. Brief calls of this nature may not result in a charge. You may also rely on educational materials we provide in our office or on our web site at www.completechildrenshealth.com.

Remember, you have the option to make a clinic appointment rather than relying on telephone care.

Prescription Refills
We expect parents to monitor their children's medication use and to know when refills are needed. Please notify our office 24 hours in advance before you need the refill. Important Note: prescriptions will not be refilled after the office is closed or on weekends.

Immunization Schedule
Vaccinations are a very important part of your child's health and well being. Many diseases can be controlled or prevented by enhancing your child's immunity through vaccines. These vaccine preventable diseases are known to cause serious illnesses that can even be life threatening.

We, as pediatricians and parents ourselves, are aware that “shots” can be an intimidating and anxiety provoking issue for families. Our goal is to assist you in making an informed decision based on the facts about vaccines. Therefore, we have developed a **Vaccine Education Program** to address concerns you may have regarding vaccines.

The program includes:

1. An easy to read informational sheet addressing several related topics of controversy that you may have heard about through the media or Internet.
2. A listing of legitimate website addresses and related items for those of you seeking more information based on current medical knowledge.
3. Vaccine Information Statements (VIS) available in each of our exam rooms for you to review at the time of vaccine administration. Copies are available upon request.

Helpful Websites:

www.vaccine.org
www.cdc.gov/vaccines/parents/index
www.vaccine.chop.edu
www.vaccinesafety.edu
www.immunize.org

Books and Booklets:

Vaccinating Your Child: Questions and Answers for the Concerned Parent, Humiston & Good
Vaccines: What Every Parent Should Know, Offit & Bell
The Parent's Guide to Immunizations, can be ordered from the Center for Disease Control (CDC) National Immunization Program on their website (www.cdc.gov/vaccines/pubs/parents-guide).

We hope this information will help you better understand vaccines and your child's health. Please feel free to discuss any other questions with us regarding this very important topic. To prevent misunderstandings about the charges for vaccines, please let our staff know if your insurance situation changes. If you have question about your child's vaccines please feel free to ask your child's pediatrician.

We look forward to your first visit and providing healthcare to your children.

Complete Children's Health Physicians and Staff

Complete Children's Health, P.C.

Notice Of Privacy, Credit and Collection Practices

As Required by the Privacy Regulations Created as a Result of the Health Insurance Portability and Accountability Act of 1996 (HIPAA)

THIS NOTICE DESCRIBESHOW MEDICAL INFORMATION ABOUT YOU MAY BE USED AND DISCLOSED, AND HOW YOU CAN GET ACCESS TO THIS INFORMATION. PLEASE REVIEW IT CAREFULLY.

A. OUR COMMITMENT TO YOUR PRIVACY

Our office is dedicated to maintaining the privacy of your protected health information (PHI). PHI is information about you, including demographic information, that may identify you and that relates to your past, present or future physical or mental health or condition and related health care services. In conducting our business, we will create records regarding you and the treatment and services we provide to you. Our privacy policies and procedures have long been in practice to maintain our patients' confidentiality. These policies and procedures have evolved as the needs of technology and medical practices change. These policies and procedures as outlined in this Notice will continue to be monitored and may change when appropriate.

The United States Congress has passed the Health Insurance Portability and Accountability Act. We are required by law to provide you with this Notice of our legal duties and the privacy practices that we maintain in our office concerning your PHI. We are required by law to maintain the confidentiality of health information that identifies you. By law, we must follow the terms of the Notice that we have in effect at the time.

We realize that these laws are complicated, but we must provide you with the following important information:

How we may use and disclose your PHI
Your privacy rights in regard to your PHI
Our obligations concerning the use and disclosure of your PHI

We may change the terms of our Notice, at any time. The new Notice will be effective for all PHI that we maintain at that time. You may request a copy of our most current Notice at any time. We will post a copy of our current Notice in our offices in a visible location at all times and on our website at www.completechildrenshealth.com.

B. IF YOU HAVE QUESTIONS ABOUT THIS NOTICE, PLEASE CONTACT:

Privacy Officer
8201 Northwoods Drive
Lincoln, NE 68505
(402)465-5600

C. WE MAY USE AND DISCLOSE YOUR PHI IN THE FOLLOWING WAYS
The following are examples of the types of uses and disclosures of your PHI that our office may make under this Notice. These examples are not meant to be exhaustive, but to describe the types of uses and disclosures that may be made by our office.

1. Treatment. Our office will use and disclose your PHI to treat you. For example, we may ask you to have laboratory tests (such as blood or urine tests), and we may use the results to help us reach a diagnosis. We might use your PHI in order to write a prescription for you, or we might disclose your PHI to a pharmacy when we order a prescription for you. Many of the people who work for our office – including, but not limited to, our doctors and nurses – may use or

disclose your PHI in order to treat you or to assist others such as hospitals, specialists, home health agencies or your primary care physician in your treatment. Additionally, we may disclose your PHI to others who may assist in your care, such as your spouse, children or parents.
Appointment Reminders/Returning Your Phone Call/Treatment Options/Health Related Benefits. Our office will try to disclose only the minimum necessary PHI for our patients while completing these tasks and may leave messages in Voice Mail.
Release of Information to Family/Friends. Our office may release your PHI to your spouse, friends and/or family members that are involved in your/the patient's care unless you request in writing, as described below, that such disclosures not be made.

2. Payment. Your PHI will be used, as needed, to obtain payment for your health care services. This may include certain activities that your health insurance plan may undertake before it approves or pays for the health care services we recommend for you such as: making a determination of eligibility or coverage for insurance benefits, reviewing services provided to you for medical necessity, and undertaking utilization review activities. For example, obtaining approval for a hospital stay may require that your relevant PHI be disclosed to your health plan to obtain approval for the hospital admission. We also may use and disclose your PHI to obtain payment from third parties that may be responsible for such costs, such as family members. Also, we may use your PHI to bill you directly for services and items.

3. Health Care Operations. Our office may use and disclose your PHI to operate our business. As examples of the ways in which we may use and disclose your information for our operations, our office may use your PHI to evaluate the quality of care you received from us, or to conduct cost-management and business planning activities for our office.
a. Disclosures Required By Law. Our office will use and disclose your PHI when we are required to do so by federal, state or local law.
b. Mailings. Our office may use your name and address for mailings regarding services offered by our office. If you do not want to receive these materials, please contact our Privacy Officer and request that these mailings not be sent to you.
c. Business Associates. We will share your PHI with third party "business associates" that perform various activities (e.g., billing, transcription services) for the office. Whenever an arrangement between our office and a business association involves the use or disclosure of your PHI, we will have a written contract that contains terms that will protect the privacy of your PHI.

D. USE AND DISCLOSURE OF YOUR PHI IN CERTAIN SPECIAL CIRCUMSTANCES
The following categories describe unique scenarios in which we may use or disclose your identifiable health information without your consent, authorization or opportunity to object:

1. Public Health Risks/Serious Threats to Health or Safety. Our office may disclose your PHI to public health authorities that are authorized by law to collect such information. We may use and disclose your PHI when necessary to reduce or prevent a serious threat to your health and safety or the health and safety of another individual or the public. Under these circumstances, we will only make disclosures to a person or organization able to help prevent the threat. Examples: Centers for Disease Control, Food and Drug Administration, Social Service Organizations.

2. Health Oversight Activities. Our office may disclose your PHI to health oversight agencies for quality accreditation or other activities authorized by law. Examples: Tumor Registries, licensure, investigations, inspections, audits, surveys, or disciplinary actions (such as civil, administrative, and criminal procedures or actions), or other activities necessary for the government to monitor government programs, compliance with civil rights laws and the health care system in general.

3. Legal Proceedings. Our office may disclose your PHI in the course of any judicial or administrative proceeding, in response to an order of a court or administrative tribunal (to the extent such disclosure is expressly authorized), in certain conditions in response to a subpoena, discovery request or other lawful process.

4. Law Enforcement. Our office may also disclose your PHI, so long as applicable legal requirements are met, for law enforcement purposes. These law enforcement purposes include, but are not limited to, (1) legal processes and other proceedings required by law, (2) limited information requests for identification and location purposes, (3) requests

pertaining to victims of a crime, (4) suspicion that death has occurred as a result of criminal conduct, (5) in the event that a crime occurs on our premises, and (6) medical emergency (not on our premises) and it is likely that a crime has occurred.

5. Abuse or Neglect. Our office may disclose your PHI to a public health authority that is authorized by law to receive reports of child abuse or neglect. In addition, we may disclose your PHI if we believe that you have been a victim of abuse, neglect or domestic violence to the governmental entity or agency authorized to receive such information. In this case, the disclosure will be made consistent with the requirements of applicable federal and state laws.

6. Deceased Patients. Our office may release PHI to a medical examiner or coroner to identify a deceased individual or to identify the cause of death. We may also disclose PHI to a funeral director, as authorized by law, in order to permit the funeral director to carry out his/her duties.

7. Research. Our office may use and disclose your PHI for research purposes in certain limited circumstances. We will obtain your written authorization to use your PHI for research purposes except when: (a) our use or disclosure was approved by an Institutional Review Board or a Privacy Board; (b) we obtain the oral or written agreement of a researcher that (i) the information being sought is necessary for the research study; (ii) the use or disclosure of your PHI is being used only for the research and (iii) the researcher will not remove any of your PHI from our office; or (c) the PHI sought by the researcher only relates to decedents and the researcher agrees either orally or in writing that the use or disclosure is necessary for the research and, if we request it, to provide us with proof of death prior to access to the PHI of the decedents.

8. Military. Our office may disclose your PHI if you are a member of U.S. or foreign military forces (including veterans) and if required by the appropriate authorities.

9. National Security. Our office may disclose your PHI to federal officials for intelligence and national security activities authorized by law. We also may disclose your PHI to federal officials in order to protect the President, other officials or foreign heads of state, or to conduct investigations.

10. Inmates. Our office may disclose your PHI to correctional institutions or law enforcement officials if you are an inmate or under the custody of a law enforcement official. Disclosure for these purposes would be necessary: (a) for the institution to provide health care services to you, (b) for the safety and security of the institution, and/or (c) to protect your health and safety or the health and safety of other individuals.

11. Workers' Compensation. Our office may release your PHI for workers' compensation and similar programs.

E. YOUR RIGHTS REGARDING YOUR PHI
You have the following rights regarding the PHI that we maintain about you:

1. Confidential Communications. You have the right to request that our office communicate with you about your health and related issues in a particular manner or at a certain location. For instance, you may ask that we contact you at home, rather than work. In order to request a type of confidential communication, you must make a written request to the Privacy Officer specifying the requested method of contact, or the location where you wish to be contacted. Our office will accommodate reasonable requests, however our office is not required to agree to every or any restriction that you may request. You do not need to give a reason for your request.

2. Requesting Restrictions. You have the right to request a restriction in our use and/or disclosure of your PHI for treatment, payment and/or health care operations. Additionally, you have the right to request that we restrict our disclosure of your PHI to only certain individuals involved in your care or the payment for your care, such as family members and friends. We are not required to agree to your request; however, if we do agree, we are bound by our agreement except when otherwise required by law, in emergencies, or when the information is necessary to treat you. In order to request such a restriction in our use or disclosure of your PHI, you must make your request in writing to the Privacy Officer. Your request must describe in a clear and concise fashion: (a) the information you wish restricted; (b) whether you are requesting to limit our office's use, disclosure or both; and (c) to whom you want the limits to apply.

3. Inspection and Copies. You have the right to inspect and obtain a copy of the PHI that may be used to make decisions about you, including patient medical records and billing records, but not including psychotherapy notes. You must submit your request in writing to the Privacy Officer in order to inspect and/or obtain a copy of your PHI. Our office may charge a fee for the costs of copying, mailing, labor and supplies associated with your request. Our office may deny your request to inspect and/or copy in certain limited circumstances; however, you may request a review of our denial.

4. Amendment. You may ask us to amend your health information if you believe it is incorrect or incomplete, and you may request an amendment for as long as the information is kept by or for our office. To request an amendment, your request must be made in writing and submitted to the Privacy Officer. You must provide us with a reason that supports your request for amendment. Our office will deny your request if you fail to submit your request (and the reason supporting your request) in writing. Also, we may deny your request if you ask us to amend information that is in our opinion: (a) accurate and complete; (b) not part of the PHI kept by or for our office; (c) not part of the PHI which you would be permitted to inspect and copy; or (d) not created by our office, unless the individual or entity that created the information is not available to amend the information.

5. Accounting of Disclosures. All of our patients have the right to request an "accounting of disclosures." An "accounting of disclosures" is a list of certain non-routine disclosures our office has made of your PHI for non-treatment or operations purposes. Use of your PHI as part of the routine patient care in our office is not required to be documented. Examples: the doctor sharing information with the nurse; or the billing department using your information to file your insurance claim. In order to obtain an accounting of disclosures, you must submit your request in writing to the Privacy Officer. All requests for an "accounting of disclosures" must state a time period, which may not be longer than six (6) years from the date of disclosure and may not include dates before April 14, 2003. The first list you request within a 12-month period is free of charge, but our office may charge you for additional lists within the same 12-month period. Our office will notify you of the costs involved with additional requests, and you may withdraw your request before you incur any costs.

6. Right to a Paper Copy of This Notice. You are entitled to receive a paper copy of our Notice. You may ask us to give you a copy of this Notice at any time. To obtain a paper copy of this Notice, contact the Privacy Officer.

7. Right to File a Complaint. If you believe your privacy rights have been violated, you may file a complaint with our office or with the Secretary of the Department of Health and Human Services. To file a complaint with our office, contact the Privacy Officer. All complaints must be submitted in writing. You will not be penalized for filing a complaint.

8. Right to Provide an Authorization for Other Uses and Disclosures. Our office will obtain your written authorization for uses and disclosures that are not identified by this Notice or permitted by applicable law. In addition, an authorization may be requested for uses and disclosures that are identified in this Notice. Any authorization you provide to us regarding the use and disclosure of your PHI may be revoked at any time in writing. After you revoke your authorization, we will no longer use or disclose your PHI for the reasons described in the authorization. Please note, we are required to retain records of your care.

Again, if you have any questions regarding this Notice or our health information privacy policies, please contact the Privacy Officer.

CREDIT AND COLLECTION POLICY

Notify our Billing Department in case of errors or questions about your bill (402) 327-6010

We must hear from you no later than 60 days after your first bill is sent on which the error or problem appeared. You can telephone us, but doing so will not preserve your rights.

In writing, give us the following information; your name, account number, dollar amount of the suspected error, posting date of the transaction an explanation of why you believe there is an error. Please be sure the person responsible for the account signs all correspondence.

Responsible Party: The parent/legal guardian bringing the child(ren) into the office will be considered the responsible party for billing purposes. If the parents are divorced or custody has been transferred to a legal guardian, the custodial parent/legal guardian who brings the child(ren) in will be responsible for the bill. It is then the obligation of that parent, not our office, to collect medical bills from the other parent. Emancipated minors are responsible for their own bills.

We do not get involved in billing disputes in cases involving divorce or separation, and will not split bills among family members.

Courtesy Claim Filing: We file your insurance claim with your primary insurance company as a courtesy to you. We will ask for your current insurance plan information at the time of each appointment. Please bring your insurance card with you for every visit, and promptly inform us of any changes in your insurance coverage.

Co-Pays: Your co-pay is due at the time of your office visit. If we have a contract with your insurance carrier, we are responsible for collecting the co-pay and you are responsible for paying it. If you do not pay the co-pay at the time of visit, we can call your insurance company and state that you are not making your co-payments. If your insurance does not have a co-pay, but instead has a deductible or coinsurance, payment in full will be expected.

Insurance: After filing your insurance, we will wait 60 days for a response. If we have no response from your insurance company, you will be personally responsible for the unpaid balance. You will
then have 30 days after the receipt of your first statement to make the minimum monthly payment. If you do not have insurance, you are expected to make payment in full at the time of your visit.

Payment Plan: *If you are unable to a pay your account in full, you may contact our Billing Department to discuss a payment plan. A payment plan means you will make your payment each month. If you are unable to do so,* ***you will need to contact the Billing Department.*** *Any new patient balances incurred after setting*

Minimum Payment: A minimum payment of $50.00 or 20% of the outstanding balance (which-ever is greater) is required on any outstanding balance or charge incurred.

Payment Plan: *If you are unable to a pay your account in full, you may contact our Billing Department to discuss a payment plan. A payment plan means you will make your payment each month. If you are unable to do so,* ***you will need to contact the Billing Department.***

Any new patient balances incurred after setting up your payment plan will not automatically be added to the payment plan. You will need to contact the Billing Department regarding payment of these balances or to revise your payment plan.

Past Due Balance: If your balance is over 60 days, you will receive an initial letter regarding your past due balances. We ask that you call our Billing Department within 15 days of the date of the letter to set up a payment schedule.

If you do not contact our Billing Department. within ten days after the final notice, your account will then be turned over to a collection agency.

Collection Agency: Once your account is turned over to our collection agency, it is in their hands and we will not take the account out of collections. All questions or payments should be sent to them.

After your account is turned over to our collection agency, you must make payment in full by cash. We also reserve the right to terminate you from our practice.

We accept VISA, MasterCard, Discover, American Express and Debit Cards payments.

I have received a copy of Complete Children's Heath's Privacy, Credit and Collection Policies.

I authorize the release of all or any part of my child's medical record to persons, corporations, or other entities responsible for payment of all or part of my child's medical care including but not limited to insurance companies, employers, workers' compensation carriers, or other entities providing billing, credit, payment or collection services on my child's account. I agree to pay Complete Children's Health for services rendered. I assign to Complete Children's Health all insurance benefits to which my child may be entitled for the charges owed to Complete Children's Health. I agree to pay for any and all charges not paid by my child's insurance carrier.

Parent/Guardian Name:

_____

Child(ren)'s Name(s) and Date of Birth:

_____

_____

_____

_____

Parent/Guardian Signature:

_____ Date:_____

COMPLETE CHILDREN'S HEALTH, P.C.

AUTHORIZATION TO RELEASE PROTECTED HEALTH INFORMATION

Please print request in black ink, include either address or fax number.

_____ ____/____/____

Patient Name: Last First MI Date of Birth

Release Information From :

Name: _____
Address: _____
_____
Phone: _____
FAX: _____

Release Information to:

Complete Children's Health
Medical Records
Phone: 402-327-6008
Fax: 402-327-6092
***Faxing is preferred method to receive records**

Reason for Release: _____

Release the following Health Information:

☐ Entire Medical Record ☐ Inclusive Dates Only ___/___/___ through ___/___/___

☐ Immunization Records ☐ Other _____

I hereby authorize the above facility/provider to disclose medical information concerning the above named patient to the party identified in the section titled "Release Information To". I understand that the information to be released may include information regarding Psychological or psychiatric conditions, Drug and Alcohol usage, and AIDS/HIV related information. I understand that once this information is disclosed, it may be subject to re-disclosure by the recipient and may no longer be protected. I understand that this authorization is voluntary and that I may refuse to sign this authorization. Unless allowed by law my refusal to sign will not affect my ability to obtain treatment, receive payment or eligibility for benefits.

Expiration or revocation of authorization: I understand that I may revoke this authorization at any time.

Use of copies: A copy of this authorization may be utilized with the same effectiveness as an original.

Reimbursement: Complete Children's Health, P.C. reserves the right to recover costs involved in producing the requested information. You or the recipient of the records may be charged $20 plus 50 cents per page for handling and copying this information.

Patient Age: If the patient is 19 years of age or older, the patient must sign and date the form.

_____ _____ _____
Printed Name Date Phone number if questions

_____ _____
Signature Relationship to Patient

Patient Name:_____ Date of Birth_____Age _____ Date_____

Medical History Form

This form is necessary to provide the "complete picture" of your child's health to your provider. It includes information about the home and school/daycare environments as well as gathering information regarding all health care received outside of our office. By gathering this information, it allows your provider to offer the best care possible for your child(ren).

Please print

Social History Please Print—

Names of: Parent's & Sibling's plus list others living with the child (Extended family, step-family, Grandparents… living with the child)	**DOB**	**Relationship to Child**	**Lives with Child**

1. Parents Marital Status: ☐ Married ☐Divorced ☐Separated ☐Never Married ☐Other_____
2. If parents are not living together or if child does not live with parents, what is the child's custody status?

   _____
3. Parent's Occupation: Parent :_____Parent:_____
4. Daytime Status: ☐Home ☐Daycare ☐School Daycare\School Name_____
5. Does anyone in the household smoke? ☐yes ☐no
6. Does anyone at daycare smoke? ☐yes ☐no ☐Not applicable
7. Are there pets in the home? ☐yes ☐no
8. Are there pets in the daycare? ☐yes ☐no ☐Not applicable
9. Are there firearms in the home? ☐yes ☐no (If yes please check what applies)
   - **a.** ☐They are hidden away without gun locks.
   - **b.** ☐They are hidden away but have gun locks on them.
   - **c.** ☐They are locked up in a gun safe or cabinet.
   - **d.** ☐Other_____

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Patient Name:_____

Family History— (Check all that apply) Please Print

☐ **Cancer**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Asthma**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Nasal Allergies**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Diabetes** (**before 50 years old)**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **High Blood Pressure (before 50 years old)**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **High Cholesterol**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Heart Disease (before 50 years old)**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Rheumatologic Disease (Arthritis, Lupus, Thyroid Disease)**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Kidney Disease**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Liver Disease**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Anemia**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Bleeding Disorder**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Mental Illness**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Epilepsy or Seizures**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Alcohol Abuse**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Drug Abuse**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Deafness**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Tuberculosis**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Bed-wetting** (**after 10 years old)**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Immune Problems**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **HIV or AIDS**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather
☐ **Unexplained Sudden Death (before 50 years old)**	☐Mom	☐Dad	☐Brother	☐Sister	☐ Grandmother	☐Grandfather

------CONTINUE TO NEXT PAGE-----

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Patient Name:_____

Birth History-- Please Print

1. Was the child adopted? ☐Yes ☐No (if yes answer below)
    a. Was it an international adoption? ☐Yes ☐No (If yes answer below)
        i. From what country? _____ _____
2. Birth Weight?_____ ☐Unknown
3. How many weeks Gestation? _____ ☐Premature ☐Full term ☐Unknown
4. Was the delivery? ☐ Vaginal ☐Cesarean
5. If cesarean, why? _____
6. Did your baby have any problems right after birth? ☐Yes ☐No (if yes answer below)
    a. Explain problems_____

    _____
7. Was initial feeding? ☐Breast? ☐Bottle? ☐Unknown
8. Did mother have any illness or problem with her pregnancy? ☐Yes ☐No (If yes answer below)
    a. Please explain_____

    _____
9. During pregnancy, did mother?
    a. Smoke? ☐Yes ☐No
    b. Drink Alcohol? ☐Yes ☐No
    c. Use drugs or medications? ☐Yes ☐No (If yes answer below)
        i. Please explain _____
10. Did your baby go home with mother from the hospital? ☐Yes ☐No (If no answer below)
    a. Please explain _____

    _____

Developmental History---Please Print

11. When did child?
    a. Sit up? ☐Normal ☐Delayed ☐Unknown
    b. Walk? ☐Normal ☐Delayed ☐Unknown
    c. Speech development ☐Normal ☐Delayed ☐Unknown
12. Has your child ever been evaluated for or diagnosed with a developmental delay? ☐Yes ☐No (If yes answer below)
    a. Please explain _____
13. Is your child in School? ☐Yes ☐No (If yes answer below)
    a. How is he/she doing in academic subjects? _____
    b. Is he/she in special resource class? ☐Yes ☐No
    c. Has he/she failed or repeated a grade? ☐Yes ☐No
    d. Has he/she been diagnosed with a learning disorder? ☐Yes ☐No

----OVER----

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Patient Name:_____

Past Medical History—Please Print

1. Please list any previous surgeries or hospitalizations?(list month/year, hospital and type of surgery) ☐ **None**

_____

2. Please list any serious injuries or accidents ☐ **None**

_____

3. Any drug or food allergies? ☐Yes ☐No (if yes list below)
   a. _____

4. **Does your child have, or has he/she ever had:**

Chicken pox	☐ Yes ☐ No	Bed-wetting (after 5 years old)	☐ Yes ☐ No
If yes when: _____		Thyroid or other endocrine problem	☐ Yes ☐ No
Frequent ear infections	☐ Yes ☐ No	Any chronic or recurrent skin problem	☐ Yes ☐ No
Problems with hearing or ears	☐ Yes ☐ No	(acne, eczema, etc)	
Food or environmental allergies	☐ Yes ☐ No	Frequent headaches	☐ Yes ☐ No
Problems with eyes or vision	☐ Yes ☐ No	Convulsions or other neurologic problem	☐ Yes ☐ No
Asthma	☐ Yes ☐ No	Diabetes	☐ Yes ☐ No
Frequent bronchitis or pneumonia	☐ Yes ☐ No	Cancer	☐ Yes ☐ No
Recurrent croup	☐ Yes ☐ No	HIV/AIDS	☐ Yes ☐ No
Other chronic or serious lung disease	☐ Yes ☐ No	Sexually transmitted disease	☐ Yes ☐ No
Tuberculosis or positive TB skin test	☐ Yes ☐ No	Emotional disorder or suicide attempts	☐ Yes ☐ No
High blood pressure	☐ Yes ☐ No	Behavior disorder (ADHD, ODD)	☐ Yes ☐ No
High cholesterol	☐ Yes ☐ No	Psychiatric disorder	☐ Yes ☐ No
Heart murmur	☐ Yes ☐ No	Use of Alcohol	☐ Yes ☐ No
Congenital or acquired heart defect	☐ Yes ☐ No	**For girls**	
Anemia or bleeding problem	☐ Yes ☐ No	Has she started her menstrual periods	☐ Yes ☐ No
Blood transfusion	☐ Yes ☐ No	Are there problems with her periods	☐ Yes ☐ No
Frequent abdominal pain	☐ Yes ☐ No	Other	☐ Yes ☐ No
Constipation requiring doctor visits	☐ Yes ☐ No		
Bladder or kidney infection	☐ Yes ☐ No		

Please explain any yes answers: _____

_____

_____

PLEASE PROVIDE PATIENT'S IMMUNIZATION HISTORY FOR INITIAL VISIT

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Revised 4/22/2014

Explore the research opportunities with Midwest Children's Health Research Institute, the research department of Complete Children's Health, P.C.

Midwest Children's Health Research Institute is dedicated to improving the health of children by helping improve the quality and safety of infant formula, pediatric vaccines and medications that contribute to a healthier child through clinical research.

You may be approached regarding a clinical trial that is currently enrolling at Complete Children's Health during one of your office visits, if your child meets the entrance criteria. It is always up to you as the parent to ask your provider any questions you may have about the study and decide if you wish to participate.

Below are answers to a few questions that may come to mind as a parent. Please feel free to call our research department with any further questions you may have or to inquire about clinical trials we are currently enrolling.

What is a clinical trial?

A clinical trial is a study using healthy human volunteers to answer specific question about a new drug, vaccine or medical device. Carefully conducted clinical trials are the safest and most efficient way to find treatments and new ways to improve health.

Are clinical trials safe?

Safety is the top priority of a clinical trial.

Parents and volunteers are fully informed of the study requirements, including risks and benefits prior to study participation.

Parents and volunteers must freely consent to participate and are free to withdraw from a clinical trial at any time.

Why participate in a clinical trial?

Parents have the opportunity to have their child gain access to new treatments and vaccines before they are widely available to the general public.

Your child will receive one on one medical care and education while participating in a clinical trial.

No matter what the reason may be for participation, it can be very rewarding and essential to medical advancement.

Will I have restrictions to follow while participating in a clinical trial?

Each trial will have restrictions that need to be followed. Prior to enrollment detailed information will be provided regarding any restrictions.

Will there be a charge to participate in a clinical trial?

There will be no charge to participate in a clinical trial.

How can my child participate?

For most trials your child needs to be generally healthy, however some studies involve volunteers that have a specific health condition, such as asthma or behavior issues.

You may receive more information by contacting the research department (MCHRI) at 402-327-6065

COMPLETE CHILDREN'S HEALTH
Well Child and Adolescent Care Schedule

AGE	ACTIVITY	IMMUNIZATIONS/TEST
2 weeks	Exam, Education	None
2 months	Exam, Education	DTaP-Polio-Hib, Hepatitis B Pneumococcal,Rotavirus
4 months	Exam, Education	DTaP-Polio-Hib, Hepatitis B (if birthdose not given) Pneumococcal,Rotavirus
6 months	Exam, Education	DTaP-Polio-Hib, Pneumococcal, Hepatitis B, Rotavirus
9 months	Exam, Education	None
12 months	Exam, Education	MMR, VZV, Hepatitis A, Anemia test, Lead test, TB test as needed
15 months	Exam, Education	DTaP-Polio-Hib, Pneumococal
18 months	Exam, Education	Hepatitis A
24 months	Exam, Education	Lead test, TB test as needed
30 months	Exam, Education	None
3 years	Exam, Education	Blood Pressure (at each exam 3 yrs & older)
4 years	Exam, Education	MMR, VZV, DTaP, Polio
5 years	Exam, School Readiness	Vision and Hearing Screens (MMR, VZV, DTaP, Polio if not given at 4 year)
6 -10 years	Exam, Health Education Physical Exam Yearly	Catch-up Immunizations
11-18 years	Annual Sports/Adolescent Exam Yearly	Tdap, Meningococcal, HPV Catch-up Immunizations Anemia Test (menstruating females)

Your Pediatrician will review immunizations on each visit for the needs of your child.
Schedule may vary due to vaccine availability

Updated 2.16.2017

COMPLETE CHILDREN'S HEALTH

To our valued patients and families,

Vaccinations are a very important part of your child's health and well being. Many diseases can be controlled or prevented by enhancing your child's immunity through vaccines. These vaccine preventable diseases are known to cause serious illnesses that can even be life threatening.

We, as pediatricians and parents ourselves, are aware that "shots" can be an intimidating and anxiety provoking issue for families. Our goal is to assist you in making an informed decision based on the facts about vaccines. Therefore, we have developed a **Vaccine Education Program** to address concerns you may have regarding vaccines.

The program includes:

1) An easy to read informational sheet addressing several related topics of controversy that you may have heard about through the media or Internet.
2) A listing of legitimate website addresses and related items for those of you seeking more information based on current medical knowledge.
3) Vaccine Information Statements (VIS) available in each of our exam rooms for you to review at the time of vaccine administration. Copies are available upon request.

Helpful Websites:

www.vaccine.org
www.cdc.gov/nip/vacsafe
www.vaccine.chop.edu
www.vaccinesafety.edu
www.immunize.org

Books and Booklets:

Vaccinating Your Child: Questions and Answers for the Concerned Parent, Humiston & Good

Vaccines: What Every Parent Should Know, Offit & Bell

The Parent's Guide to Immunizations
Can be ordered from the Center for Disease Control (CDC) National Immunization Program on their website (www.cdc.gov/nip).

Vaccine Information Statements:

Available in each of our exam rooms for you to review at the time of vaccine administration. Copies are available upon request.

We hope this information will help you better understand vaccines and your child's health. Please feel free to discuss any other questions with us regarding this very important topic.

Sincerely,

Complete Children's Health
Physicians & Staff

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

Facts for Parents About Vaccine Safety

Why are vaccines important?

Immunizations protect children. Vaccine-preventable diseases can have dangerous consequences, including seizures, brain damage, blindness and even death. Because of the success of the national immunization program, many young parents today have never seen a case of one of these illnesses, but measles, meningitis, chickenpox, pertussis and other diseases exist in the world and would re-emerge here if immunization rates fell. For example, recent outbreaks of measles in the U.S. were traced to unvaccinated children who became infected while traveling in Europe. Likewise, it would only take one case of polio from another country to bring the disease back to the U.S. if children are not protected by vaccination.

Are vaccines safe?

Yes. Today's vaccines are safer than any in history. Vaccines contain antigens, which are either live but very weakened viruses, inactivated viruses, or small parts of bacteria or viruses that prompt the body to produce protective antibodies without causing the disease. Even though children receive more vaccines now, the total number of antigens is less because today's vaccines are more refined than older versions. At a very young age, children's immune systems are equipped to respond to many antigens at the same time, including those in vaccines as well as the ones they encounter in their daily activities such as eating, breathing and playing.

In addition to antigens, vaccines contain ingredients to prevent contamination and improve effectiveness. These ingredients have been found to be safe in humans in the quantities given in vaccines, which is much less than children are exposed to in their environment, food and water. Valid scientific studies have shown there is no link between autism and thimerosal, a mercury-based preservative once used in several vaccines (and still used in some flu vaccine). However, since thimerosal was removed from childhood vaccines in 2001, autism rates have actually increased, supplying further evidence that thimerosal does not cause autism.

Before a vaccine is licensed, it is studied in thousands of children and in combination with other vaccines. After licensure, the federal government continues to monitor a vaccine's safety. This continuous monitoring ensures researchers will uncover any rare side effects, even if they affect only a small number of children. For example, a rotavirus vaccine was withdrawn in 1999 after it was linked to intestinal blockages in about 100 children. This vaccine was replaced by a new and safer product. Today's recommended vaccines have been shown to be safe and effective for millions of children.

Can I delay or skip vaccines?

It is not a good idea to skip or delay vaccines, as this will leave your child vulnerable to diseases for a longer time. Children are most vulnerable to complications from disease in their early years of life, when vaccines provide protection, and some vaccines produce a better immune response at particular ages. Parents should follow the schedule provided by the U.S. Centers for Disease Control and Prevention, the American Academy of Pediatrics and the American Academy of Family Physicians, which is designed by experts to ensure maximum protection and safety for children at various ages. This schedule allows for some flexibility to delay certain shots when advised by a child's pediatrician due to illness, certain chronic conditions or other medical reasons. Parents should discuss any concerns with their child's pediatrician.

More information is available at www.aap.org/immunization and www.cdc.gov/vaccines.

June 2008

Vaccine Safety: The Facts

Why vaccinate? Vaccines save lives and protect against the spread of disease. If you decide not to immunize your child, you put your child at risk. Your child could catch a disease that is dangerous or deadly. Getting vaccinated is much better than getting the disease.

Your pediatrician knows that you care about your child's health and safety. That's why you need to get all the scientific facts from a medical professional you can trust before making any decisions based on stories you may have seen or heard on TV, the Internet, or from other parents. Your pediatrician cares about your child too and wants you to know that…

- **Vaccines work.** They have kept children healthy and have saved millions of lives for more than 50 years. Most childhood vaccines are 90% to 99% effective in preventing disease. And if a vaccinated child does get the disease, the symptoms are usually less serious than in a child who hasn't been vaccinated. There may be mild side effects, like swelling where the shot was given, but they do not last long. And it is rare for side effects to be serious.
- **Vaccines are safe.** All vaccines must be tested by the Food and Drug Administration (FDA). The FDA will not let a vaccine be given unless it has been proven to be safe and to work well in children. The data get reviewed again by the Centers for Disease Control and Prevention (CDC), the American Academy of Pediatrics, and the American Academy of Family Physicians before a vaccine is officially recommended to be given to children. Also, the FDA monitors where and how vaccines are made. The places where vaccines are made must be licensed. They are regularly inspected and each vaccine lot is safety-tested.
- **Vaccines are necessary.** Your pediatrician believes that your children should receive all recommended childhood vaccines. In the United States vaccines have protected children and continue to protect children from many diseases. However, in many parts of the world many vaccine-preventable diseases are still common. Since diseases may be brought into the United States by Americans who travel abroad or from people visiting areas with current disease outbreaks it's important that your children are vaccinated.

Also, children with certain health problems may not be able to get some vaccines or may need to get them later. Since each child is different, your child's doctor will know what is best for your child. You should get information about each vaccine at the doctor's office. Ask your child's doctor if you don't understand what you've read.

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Vaccine Safety: The Facts

- **Vaccines are studied.** To make sure the vaccine continues to be safe, the FDA and the CDC created the Vaccine Adverse Event Reporting System (VAERS). All doctors must report serious side effects of vaccines to VAERS so they can be studied. Parents can also file reports with VAERS. For more information about VAERS, visit www.vaers.hhs.gov or call the toll-free VAERS information line at 800/822-7967.

  Based on VAERS reports, vaccine safety professionals continuously look for any problem with a vaccine, study the problem, and decide what to do. And if there is a problem, changes are made as soon as possible. For example,

  - If a vaccine is no longer safe, it is no longer given.
  - If there are new side effects, safety alerts are sent out to your health care providers.

  Another way the CDC checks vaccine safety is by studying information about side effects collected from 8 large insurance companies. The Vaccine Safety Datalink (VSD) helps identify if there are any serious problems or safety issues from the records of thousands of children.

  In the rare case that a child has serious side effects to a vaccine, parents can contact the National Vaccine Injury Compensation Program (VICP) at 800/338-2382 or www.hrsa.gov/vaccinecompensation. This federal program was created to help pay for the care of people who have been harmed.

Resources

American Academy of Pediatrics
www.aap.org
www.cispimmunize.org

Food and Drug Administration
www.fda.gov

Centers for Disease Control and Prevention
www.cdc.gov/vaccines

National Network for Immunization Information
www.immunizationinfo.org

From your doctor	
If you have any questions or concerns, feel free to ask your pediatrician.	Please note: Listing of resources does not imply an endorsement by the American Academy of Pediatrics (AAP). The AAP is not responsible for the content of the resources mentioned in this publication. Phone numbers and Web site addresses are as current as possible, but may change at any time. The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.

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Q&A

Volume 8, Winter 2015

The Facts About Childhood Vaccines

The Children's Hospital of Philadelphia®

VACCINE EDUCATION CENTER

Q. How can parents sort out conflicting information about vaccines?

A. Decisions about vaccine safety must be based on well-controlled scientific studies.

Parents are often confronted with "scientific" information found on television, on the Internet, in magazines and in books that conflicts with information provided by healthcare professionals. But few parents have the background in microbiology, immunology, epidemiology and statistics to separate good scientific studies from poor studies. Parents and physicians benefit from the expert guidance of specialists with experience and training in these disciplines.

Committees of these experts are composed of scientists, clinicians and other caregivers who are as passionately devoted to our children's health as they are to their own children's health. They serve the Centers for Disease Control and Prevention (www.cdc.gov/vaccines), the American Academy of Pediatrics (www.aap.org) and the Infectious Diseases Society of America (www.nnii.org), among other groups. These organizations provide excellent information to parents and healthcare professionals through their websites. Their task is to determine whether scientific studies are carefully performed, published in reputable journals and, most importantly, reproducible. Information that fails to meet these standards is viewed as unreliable.

When it comes to issues of vaccine safety, these groups have served us well. They were the first to figure out that intestinal blockage was a rare consequence of the first rotavirus vaccine, and the vaccine was quickly discontinued. And they recommended a change from the oral polio vaccine, which was a rare cause of paralysis, to the polio shot when it was clear that the risks of the oral polio vaccine outweighed its benefits.

These groups have also investigated possible relationships between vaccines and asthma, diabetes, multiple sclerosis, SIDS and autism. No studies have reliably established a causal link between vaccines and these diseases — if they did, the questioned vaccines would be withdrawn from use.

Q. Are vaccines still necessary?

A. Although several of the diseases that vaccines prevent have been dramatically reduced or eliminated, vaccines are still necessary:

• *to prevent common infections*

Some diseases are so common in this country that a choice not to get a vaccine is a choice to get infected. For example, choosing not to get the pertussis (whooping cough) vaccine is a choice to risk a serious and occasionally fatal infection.

• *to prevent infections that could easily re-emerge*

Some diseases in this country continue to occur at very low levels (for example, measles, mumps and *Haemophilus influenzae* type b, or Hib). If immunization rates in our schools or communities are low, outbreaks of these diseases are likely to occur. This is exactly what happened in the late 1980s and early 1990s when thousands of children were hospitalized with measles and more than 120 died. Children were much more likely to catch measles if they weren't vaccinated. Recent measles and mumps outbreaks in the United States also provide evidence of how quickly a disease can re-emerge.

• *to prevent infections that are common in other parts of the world*

Although some diseases have been completely eliminated (polio) or virtually eliminated (diphtheria) from this country, they still occur commonly in other parts of the world. Children are paralyzed by polio in Pakistan, Afghanistan and Nigeria and sickened by diphtheria in India and other countries in the southeastern region of Asia. Because there is a high rate of international travel, outbreaks of these diseases are only a plane ride away.

Centers for Disease Control and Prevention. *Epidemiology and Prevention of Vaccine-Preventable Diseases.* 12th Edition. Atkinson W, Wolfe S, Hamborsky J, eds. Washington, DC: Public Health Foundation; 2011.

Q. Do vaccines contain additives?

A. Many vaccines contain trace quantities of antibiotics or stabilizers.

Antibiotics are used during the manufacture of vaccines to prevent inadvertent contamination with bacteria or fungi. Trace quantities of antibiotics are present in some vaccines. However, the antibiotics contained in vaccines (neomycin, streptomycin or polymyxin B) are not those commonly given to children. Therefore, children with allergies to antibiotics such as penicillin, amoxicillin, sulfa or cephalosporins can still get vaccines.

Gelatin is used to stabilize live viral vaccines and is also contained in many food products. People with known allergies to gelatin contained in foods may have severe allergic reactions to the gelatin contained in vaccines. However, this reaction is extremely rare.

Offit PA, Jew RK. Addressing parents' concerns: Do vaccines contain harmful preservatives, adjuvants, additives, or residuals? *Pediatrics* 2003,112:1394-1401.

American Academy of Pediatrics. In Pickering LK, ed. *Red Book: 2012 Report of the Committee on Infectious Diseases.* 29th Edition. Elk Grove Village, IL.

Q. Are vaccines safe?

A. Because vaccines are given to people who are not sick, they are held to the highest standards of safety. As a result, they are among the safest things we put into our bodies.

How does one define the word safe? If safe is defined as "free from any negative effects," then vaccines aren't 100 percent safe. All vaccines have possible side effects. Most side effects are mild, such as fever, or tenderness and swelling where the shot is given. But some side effects from vaccines can be severe. For example, the pertussis vaccine is a very rare cause of persistent inconsolable crying, high fever or seizures with fever. Although these reactions do not cause permanent harm to the child, they can be quite frightening.

If vaccines cause side effects, wouldn't it be "safer" to just avoid them? Unfortunately, choosing to avoid vaccines is not a risk-free choice — it is a choice to take a different and much more serious risk. Discontinuing the pertussis vaccine in countries like Japan and England led to a tenfold increase in hospitalizations and deaths from pertussis. Recently, a decline in the number of children receiving measles vaccine in the United Kingdom and the United States led to an increase in cases of measles.

When you consider the risk of vaccines and the risk of diseases, vaccines are the safer choice.

Plotkin S, et al. *Vaccines.* 6th Edition. Philadelphia, PA: W.B. Saunders and Co., 2012.

Q. Do children get too many shots?

A. Newborns commonly manage many challenges to their immune systems at the same time.

Because some children could receive as many as 25 shots by the time they are 2 years old and as many as five shots in a single visit to the doctor, many parents wonder whether it is safe to give children so many vaccines.

Although the mother's womb is free from bacteria and viruses, newborns immediately face a host of different challenges to their immune systems. From the moment of birth, thousands of different bacteria start to live on the surface of the skin and intestines. By quickly making immune responses to these bacteria, babies keep them from invading the bloodstream and causing serious diseases.

In fact, babies are capable of responding to millions of different viruses and bacteria because they have billions of immunologic cells circulating in the bodies. Therefore, vaccines given in the first two years of life are a raindrop in the ocean of what an infant's immune system successfully encounters and manages every day.

Offit PA, et al. Addressing parents' concerns: Do vaccines weaken or overwhelm the infant's immune system? *Pediatrics.* 2002;109:124-129.

more ▸

For the latest information on all vaccines, visit our website at

vaccine.chop.edu

Q. Is the amount of aluminum in vaccines safe?

A. Yes. All of us have aluminum in our bodies and most of us are able to process it effectively. The two main groups of people who cannot process aluminum effectively are severely premature infants who receive large quantities of aluminum in intravenous fluids and people who have long-term kidney failure and receive large quantities of aluminum, primarily in antacids. In both cases, the kidneys are not working properly or at all and the people are exposed to large quantities of aluminum over a long period of time.

The amount of aluminum in vaccines given during the first six months of life is about 4 milligrams, or four-thousandths of a gram. A gram is about one-fifth of a teaspoon of water. In comparison, breast milk ingested during this period will contain about 10 milligrams of aluminum and infant formulas will contain about 40 milligrams. Soy-based formulas contain about 120 milligrams of aluminum.

When studies were performed to look at the amount of aluminum injected in vaccines, the levels of aluminum in blood did not detectably change. This indicates that the quantity of aluminum in vaccines is minimal as compared with the quantities already found in the blood.

Baylor NW, Egan W, Richman P. Aluminum salts in vaccines – U.S. perspective. *Vaccine*. 2002;20:S18-S23.

Bishop NJ, Morley R, Day JP, Lucas A. Aluminum neurotoxicity in preterm infants receiving intravenous-feeding solutions. *New Engl J Med*. 1997;336:1557-1561.

Committee on Nutrition: Aluminum toxicity in infants and children. *Pediatrics*. 1996;97:413-416.

Ganrot PO. Metabolism and possible health effects of aluminum. *Env. Health Perspective*. 1986;65:363-441.

Keith LS, Jones DE, Chou C. Aluminum toxicokinetics regarding infant diet and vaccinations. *Vaccine*. 2002;20:S13-S17.

Pennington JA. Aluminum content of food and diets. *Food Additives and Contam*. 1987;5:164-232.

Simmer K, Fudge A, Teubner J, James SL. Aluminum concentrations in infant formula. *J Peds and Child Health*. 1990;26:9-11.

Q. Do vaccines cause autism?

A. Carefully performed studies clearly disprove the notion that vaccines cause autism.

Because the signs of autism may appear in the second year of life, at around the same time children receive certain vaccines, and because the cause of autism is unknown, some parents wondered whether vaccines might be at fault. These concerns focused on three hypotheses — autism was caused by the measles-mumps-rubella (MMR) vaccine, thimerosal, an ethylmercury-containing preservative used in vaccines, or receipt of too many vaccines too soon.

A large body of medical and scientific evidence now strongly refutes these notions. Multiple studies have found that vaccines do not cause autism. These studies included hundreds of thousands of children, occurred in multiple countries, were conducted by multiple investigators and were well controlled.

Andrews N, et al. Thimerosal exposure in infants and developmental disorders: a retrospective cohort study in the United Kingdom does not show a casual association. *Pediatrics*. 2004;114;584-591.

Dales L, et al. Time trends in autism and in MMR immunization coverage in California. *JAMA*. 2001;285:1183-1185.

Fombonne E, et al. Pervasive developmental disorders in Montreal, Quebec, Canada: prevalence and links with immunizations. *Pediatrics*. 2006;118:139-150.

Herron J, Golding J, and ALSPAC Study Team. Thimerosal exposure in infants and developmental disorders: a prospective cohort study in the United Kingdom does not show a casual association. *Pediatrics*. 2004;114;577-583.

Hviid A, et al. Association between thimerosal-containing vaccine and autism. *JAMA*. 2003;290:1763-1766.

Kaye JA, et al. Measles, mumps, and rubella vaccine and incidence of autism recorded by general practitioners: a time-trend analysis. *Brit Med J*. 2001;322:460-463.

Madsen K. Thimerosal and occurrence of autism: Negative ecological evidence from Danish population-based data. *Pediatrics*. 2003;112:604-606.

Madsen, KM, et al. A population-based study of measles, mumps, rubella vaccination and autism. *N Engl J Med*. 2002;347:1477-1482.

Taylor, B, et al. Autism and measles, mumps, and rubella vaccine: no epidemiologic evidence for a causal association. *Lancet*. 1999;351:2026-2029.

Smith MJ and Woods CR. On-time vaccine receipt in the first year does not adversely affect neuropsychological outcomes. *Pediatrics*. 2010;125(6):1134-1141.

Verstraeten T, et al. Safety of thimerosal-containing vaccines: a two-phased study of computerized health maintenance organization databases. *Pediatrics*. 2003;112:1039-1048.

Q. Does my child need to still get vaccines if I am breastfeeding?

A. Yes. The types of immunity conferred by breastfeeding and immunization are different. Specifically, the antibodies that develop after immunization are made by the baby's own immune system and, therefore, will remain in the form of immunologic memory; this is known as active immunity. In contrast, antibodies in breast milk were made by the maternal immune system, so they will provide short-term protection, but will not last more than a few weeks. These antibodies are usually not as diverse either, so the baby may be protected against some infections but remain susceptible to others. Immunity generated from breast milk is called passive immunity. Passive immunity was practiced historically when patients exposed to diphtheria were given antitoxin produced in horses; antitoxins to snake venoms are also an example of passive immunity.

Q. How can a "one-size-fits-all" approach to vaccines be OK for all children?

A. The recommended immunization schedule is not the same for all children.

In fact, recommendations for individual vaccines often vary based upon individual differences in current and long-term health status, allergies and age. Each vaccine recommendation, often characterized by a single line on the immunization schedule, is supported by about 25 to 40 additional pages of specific instructions for healthcare providers who administer vaccines. In addition, an approximately 60-page document titled "General Recommendations on Immunization" serves as the basis for all vaccine administration. The recommendations are updated as needed by the CDC and a comprehensive update is published every few years.

Q. What is the harm of separating, spacing out or withholding some vaccines?

A. Although the vaccine schedule can look intimidating, it is based upon the best scientific information available and is better tested for safety than any alternative schedules.

Experts review studies designed to determine whether the changes are safe in the context of the existing schedule. These are called concomitant-use studies.

Separating, spacing out or withholding vaccines causes concern because infants will be susceptible to diseases for longer periods of time. When a child should receive a vaccine is determined by balancing when the recipient is at highest risk of contracting the disease and when the vaccine will generate the best immune response.

Finally, changing the vaccine schedule requires additional doctor's visits. Research measuring cortisol, a hormone associated with stress, has determined that children do not experience more stress when receiving two shots as compared with one shot. Therefore, an increased number of visits for individual shots will mean an increase in the number of stressful situations for the child without benefit. In addition, there is an increased potential for administration errors, more time and travel needed for appointments, potentially increased costs and the possibility that the child will never get some vaccines

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