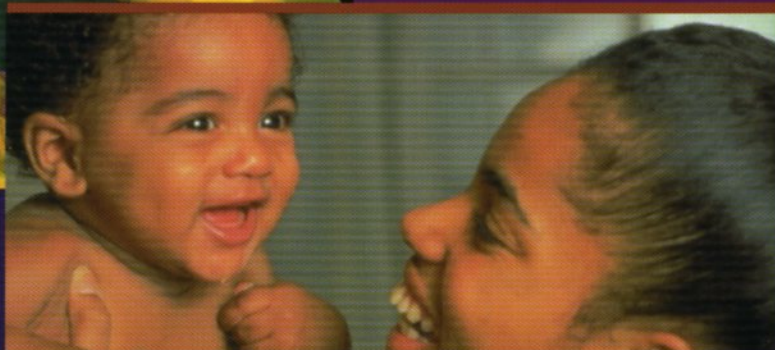


VACCINATING YOUR CHILD



QUESTIONS &
ANSWERS FOR

the concerned parent



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2ND
EDITION

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Contents

<i>Foreword</i>	<i>xiii</i>
<i>Acknowledgments</i>	<i>xv</i>

PART ONE Vaccine Use

Chapter 1 Introduction	1
To Vaccinate or Not to Vaccinate?	2
Not the Last Word	3
Permission Granted	4
Your Right to Know	4
The Goals of This Book	6
Using This Book to Form and Answer Your Questions	6
Chapter 2 Doctor Visits: What to Expect	7
The Recommended Childhood Immunization Schedule	8
Preparing for the Visit	8
<i>Keeping good vaccination records • Reminders and recall messages</i>	
Finding out About the Vaccine	10
<i>Getting your questions answered • Screening before vaccination</i>	
Before, During, and After the Shot	11
<i>Pain control: Needle tips • Where and how much vaccine should be given • Handling side effects</i>	
Conclusion	13
Chapter 3 How Vaccines Work with the Immune System	15
The Immune System	15
<i>Passive immunity • Active immunity • Vaccines and the active immune system</i>	
Two Main Types of Vaccines	18
<i>Live, attenuated vaccines • Inactivated vaccines</i>	
Vaccine Additives	20
<i>Antibiotics • Preservatives • Stabilizers • Adjuvants</i>	
What Other Questions Do Parents Ask?	21

Chapter 4 How Vaccines Get Recommended	25
The Process from Testing to Recommendation	27
<i>What tests do vaccines undergo before they are licensed? •</i>	
<i>How do licensed vaccines become recommended? • How do</i>	
<i>recommended vaccines become required for school entry?</i>	
Post-Recommendation Review	29
<i>What vaccine monitoring is done after licensure? • What is a</i>	
<i>recent example of a vaccine being re-examined? • How can</i>	
<i>the U.S. improve the vaccine approval process?</i>	
Conclusion	34
Chapter 5 Too Many Vaccines	36
Allergy and Autoimmune Disease	36
<i>Diabetes • Multiple Sclerosis (MS) • Asthma • Autism</i>	
Thimerosal	40
Other Controversies	41
<i>• Sudden Infant Death Syndrome (SIDS) • Guillain-Barré</i>	
<i>Syndrome (GBS)</i>	
Conclusion	42
Chapter 6 Medical Reasons Not to Vaccinate	43
Allergies	43
<i>Severe allergic reactions to a vaccine • Common allergens and</i>	
<i>vaccines</i>	
Encephalitis	46
Moderate to Severe Illness at the Time of Vaccination	46
A Weakened Immune System	46
Receipt of Blood Products	47
Pregnancy	47
<i>Vaccines that pregnant women should and should not receive •</i>	
<i>Pregnancy and vaccinating others in the family</i>	
What Other Questions Do Parents Ask?	50
Chapter 7 Parents' Rights	51
Your Options	52
<i>What is your right to information? • What is your right to report</i>	
<i>a vaccine side effect? • What is your right to compensation from a</i>	
<i>vaccine injury? • What are your rights before your child's entry to</i>	
<i>daycare or school? • What is your right to a school protected by</i>	
<i>vaccines?</i>	

Exemptions	55
<i>What is your right to refuse vaccination? • What about community versus individual rights?</i>	
Conclusion	57

PART TWO Routine Vaccines for Children

Chapter 8 Hepatitis B Vaccine	61
The Hepatitis B Disease	62
<i>What is hepatitis B, and how is it spread? • Who dies of chronic hepatitis B?</i>	
The Hepatitis B Vaccine	65
<i>What is hepatitis B vaccine, and how effective is it? • Who should get hepatitis B vaccine and when? • Who should not get the vaccine? • What are the vaccine risks and side effects? • Other vaccine safety concerns</i>	
What Other Questions Do Parents Ask?	70
What Does the Future Hold?	71
Chapter 9 DTaP Vaccine: Diphtheria, Tetanus, and Acellular Pertussis	73
Diphtheria	74
<i>What is diphtheria, and how is it spread?</i>	
Tetanus	76
<i>What is tetanus, and how is it spread?</i>	
Pertussis (Whooping Cough)	79
<i>What is pertussis, and how is it spread?</i>	
The DTaP Vaccine	83
<i>What is DTaP vaccine, and how effective is it? • Who should get DTaP vaccine and when? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
What Other Questions Do Parents Ask?	87
What Does the Future Hold?	88
Chapter 10 Polio Vaccine	89
The Polio Disease	91
<i>What is polio, and how is it spread?</i>	
The Polio Vaccine	93
<i>What are the polio vaccines, and how effective are they? • Who should get polio vaccine and when? • Who should not get the vaccine? • What are the vaccine risks and side effects? • What are additional historical controversies?</i>	

What Other Questions Do Parents Ask?	96
What Does the Future Hold?	99
Chapter 11 Hib Vaccine	101
The Hib Disease	102
<i>What is Hib, and how is it spread? • Is Hib still a threat?</i>	
The Hib Vaccine	105
<i>What is the Hib vaccine, and how effective is it? • Who should get Hib vaccine and when? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
What Other Questions Do Parents Ask?	106
What Does the Future Hold?	107
Chapter 12 MMR Vaccine: Measles, Mumps, and Rubella	109
Measles	110
<i>What is measles, and how is it spread?</i>	
Mumps	114
<i>What is mumps, and how is it spread?</i>	
Rubella (German Measles)	115
<i>What is rubella, and how is it spread?</i>	
The MMR Vaccine	116
<i>What is the MMR vaccine, and how effective is it? • Who should get MMR vaccine and when? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
What Other Questions Do Parents Ask?	120
What Does the Future Hold?	123
Chapter 13 Chickenpox (Varicella) Vaccine	125
The Chickenpox Disease	126
<i>What is chickenpox, and how is it spread?</i>	
The Chickenpox Vaccine	128
<i>What is chickenpox vaccine, and how effective is it? • Who should get chickenpox vaccine and when? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
What Other Questions Do Parents Ask?	131
What Does the Future Hold?	134
Chapter 14 Hepatitis A Vaccine	135
The Hepatitis A Disease	137
<i>What is hepatitis A, and how is it spread? • What are the risk factors for hepatitis A?</i>	

The Hepatitis A Vaccine	142
<i>What is the hepatitis A vaccine, and how effective is it? • Who should get the hepatitis A vaccine and when? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
What Other Questions Do Parents Ask?	143
Chapter 15 Pneumococcal Vaccine	147
The Pneumococcal Disease	149
<i>What is pneumococcal disease, and how is it spread? • Who gets pneumococcal disease?</i>	
The Pneumococcal Vaccine	151
<i>What is the pneumococcus vaccine, and how effective is it? • Who should get the vaccine and when? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
What Other Questions Do Parents Ask?	154
What Does the Future Hold?	155
Chapter 16 Flu Vaccine	157
The Flu (Influenza) Disease	158
<i>What is flu, and how is it spread? • Who gets flu? • What is the best treatment for flu?</i>	
The Flu Vaccine	160
<i>What is the flu vaccine, and how effective is it? • Who should get the vaccine and when? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
What Other Questions Do People Ask?	164
What Does the Future Hold?	164

PART THREE What You Should Know about Other Vaccines

Chapter 17 Meningococcal Vaccine	169
The Meningococcal Disease	169
<i>What is meningococcal disease, and how is it spread? • Who gets the disease? • How is it treated?</i>	
The Meningococcal Vaccine	172
<i>What is the meningococcal vaccine, and how effective is it? • Who should get the vaccine? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
What Other Questions Do Parents Ask?	174
What Does the Future Hold?	174

Chapter 18 Vaccines for Adolescents and Adults:	
Td, Chickenpox, MMR, and Hepatitis B	175
All Adolescents and Adults	176
Women of Childbearing Age	177
Healthcare Workers	177
Older Adults and Those in Nursing Homes	178
Persons with Long-term Illness or a Weakened Immune System	178
Persons at Risk for Hepatitis B and Hepatitis A	179
Other Vaccines	180
Chapter 19 Vaccines for Special Circumstances:	
Rabies and Tuberculosis	181
Rabies	181
<i>What is rabies disease, and how is it spread? • What is the treatment for rabies? • What is the rabies vaccine, and how effective is it? • Who should get the vaccine? • Who should not get the vaccine? • What are the vaccine risks and side effects? • What other questions do people ask?</i>	
Tuberculosis (TB)	185
<i>What is tuberculosis, and how is it spread? • What is the treatment for TB? • What is the TB vaccine, and how effective is it? • Who should get the vaccine? • Who should not get the vaccine? • What are the vaccine risks and side effects? • What other questions do people ask?</i>	
Chapter 20 Vaccines for Traveling Abroad:	
Japanese Encephalitis, Typhoid, and Yellow Fever	191
Japanese Encephalitis	192
<i>What is Japanese encephalitis, how is it spread, and how is it treated? • How effective is the Japanese encephalitis vaccine, and who should get it? • Who should not get the vaccine? • What are the vaccine risks and side effects? • Additional notes</i>	
Typhoid	195
<i>What is typhoid, how is it spread, and how is it treated? • How effective is typhoid vaccine, and who should get it? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
Yellow Fever	198
<i>What is yellow fever, how is it spread, and how is it treated? • How effective is yellow fever vaccine, and who should get it? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
Conclusion	201

Chapter 21 Vaccines and Bioterrorism: Smallpox and Anthrax	203
Smallpox	204
<i>The history of smallpox</i>	
The Smallpox Disease	205
<i>What is smallpox, and how is it spread?</i>	
The Smallpox Vaccine	205
<i>What is the smallpox vaccine, and how effective is it? • Who should get the vaccine? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
The Anthrax Disease	208
<i>What is anthrax, and how is it spread? • Treatment of anthrax</i>	
The Anthrax Vaccine	210
<i>What is the anthrax vaccine, and how effective is it? • Who should get the vaccine and when? • Who should not get the vaccine? • What are the vaccine risks and side effects?</i>	
What Does the Future Hold?	211
Chapter 22 Future Vaccines	213
Nasal Spray Flu Vaccine	213
Respiratory Syncytial Virus (RSV) Vaccine	214
Rotavirus Vaccine	214
Malaria Vaccine	215
Tuberculosis (TB) Vaccine	216
AIDS Vaccine	216
Cytomegalic Virus (CMV) Vaccine	216
Ulcer Vaccine	217
Cancer Vaccines	217
Alzheimers Vaccine	217
Painless Vaccines	218
Conclusion	218
Chapter 23 Where to Learn More: Government Sources, Healthcare and Universities, Parent Groups, and Pharmaceutical Manufacturers and Distributors	219
U.S. Government Sources	219
Healthcare Organizations and Universities	221
Parent Groups	224
Pharmaceutical Manufacturers and Distributors	225
<i>References</i>	226
<i>Index</i>	231
<i>About the Authors</i>	237

My experience in government is that when things are non-controversial and beautifully coordinated, there is not much going on.

—John Fitzgerald Kennedy

Knowledge is power.

—Francis Bacon

Chapter 1

Introduction

This is a historic time for childhood vaccines. Nowadays, a parent is more likely to know someone who had a vaccine side effect than someone who had one of the old vaccine-preventable diseases (such as tetanus or diphtheria). Because of the success of vaccines, American parents and health-care providers have less experience than ever before with infectious diseases such as polio and measles. At the same time, more vaccines are universally recommended, and new vaccines are being introduced for diseases that many people had previously considered a normal part of life, like influenza and chickenpox. News stories about vaccine safety appear one after another. Consider the summer of 1999, when all of these stories hit the press:

- ✚ The CDC and the American Academy of Pediatrics, which had previously recommended rotavirus vaccine to prevent diarrhea in infants, postponed further use of the vaccine when data showed that the vaccine might cause bowel obstruction.
- ✚ After questions were raised about the safety of thimerosal (a mercury-containing preservative used in many vaccines), pharmaceutical companies began complying quickly with governmental

and medical calls to eliminate the mercury, but the preservative-free vaccines cost significantly more.

- ✚ With the long-anticipated global eradication of polio close at hand, the U.S. returned to primary reliance on the injectable polio vaccine. Why? Because the vaccine given by mouth, which had been used since the mid-1960s, caused 8 to 10 cases of paralytic disease each year.
- ✚ Congressional hearings were held because of allegations that hepatitis B vaccine was too unsafe to be included in the routine childhood immunization schedule.
- ✚ The Department of Defense ordered active military forces and reservists to accept the anthrax vaccine because of bioterrorist threats, but some individuals chose court martial over compliance because they feared complications from the vaccine.

These factors have combined to fuel a growing sense of confusion, concern, and frustration among parents. Will these controversies increase the proportion of American children who do not receive vaccines? Will states relax their school entry laws? Will infectious diseases return to devastate our children? Will we realize that our fears were unfounded? When the same immunizations that have saved so many lives are being blamed for everything from autism to multiple sclerosis, from asthma to sudden infant death syndrome, parents aren't sure where to turn for answers, or even what questions to ask.

TO VACCINATE OR NOT TO VACCINATE?

That is not the question! All too often parents ask, "Are you for or against vaccination?" as if all vaccines were created equally and as if all infectious diseases were similar. As you read the chapters about individual diseases, you will see some similarities, but you will learn about the important details that distinguish the diseases from each other and the particulars that differentiate the vaccines.

And you will see that the information provided is *useful*. For example, after reading this book you may feel it is important to do the following:

- ✚ Know if your child has a medical reason not to receive a vaccine.
- ✚ Know the most common side effects of the vaccines your child is given and be prepared to treat them.
- ✚ Be aware of and alert to rare vaccine side effects.
- ✚ If you are pregnant, be sure that your obstetrician checks your blood for hepatitis B infection at the end of pregnancy and, if the test is positive, that your newborn receives hepatitis B vaccine and hepatitis B immune globulin within twelve hours after birth.
- ✚ Be sure that the medical practice your child goes to uses the newer, “acellular” pertussis vaccine.
- ✚ Be sure that the physician checks your teenager’s blood for chickenpox immunity and, if the test is negative, gives the chickenpox vaccine.

NOT THE LAST WORD

This book contains the most recent data available, as of Spring 2003, on each of the vaccines and on vaccine-preventable diseases, but no book could contain all the information you need. We do not intend this to be the last word on immunization. Rather, our intention is simply to prepare you for initiating a conversation about immunization with your child’s health-care provider. Ultimately, we believe there is no good substitute for a trustworthy healthcare provider with whom you can openly discuss your vaccine questions.

Although most parents feel comfortable with their children’s physicians, they are reluctant to ask questions or enter into a discussion. This is unfortunate because children receive the best healthcare when parents and physicians work in partnership. To be in a partnership, *you* have to be a partner.

PERMISSION GRANTED

Studies on doctor-patient communication done by a prominent health education research team at Louisiana State University confirmed what might seem like common sense to a parent. The team found that parents wanted information on vaccine risks and benefits and that they would not reflexively reject vaccines after these factors were explained. In focus groups, parents expressed the desire to have materials to read in advance of office visits because the visit itself was too hectic a time to *start* thinking about vaccine issues.

The research team created a colorful poster that suggested some questions parents should ask and hung the poster in pediatric exam rooms. Preliminary studies showed that the poster did make a difference: parents were more likely to ask questions about vaccine safety after reading the poster and were more satisfied with the visit. Further research on the effectiveness of this approach is being pursued.

Of course, what the poster *really* did was to remind parents of their questions and, probably more importantly, to give parents permission or encouragement to ask their vaccine questions.

YOUR RIGHT TO KNOW

Actually, in 1986 the federal government gave all parents—poster or not—the *right* to know what benefits and risks their children face with each vaccine. Your healthcare provider is required by federal law to provide you with this information, even if you don't ask for it. According to the National Childhood Vaccine Injury Act of 1986, your healthcare provider also is required to give you Vaccine Information Statements, one-page summaries of specific vaccine risks and benefits published by the CDC. (See Figure 1-1 for a sample of the MMR vaccine handout.) Receipt of the written summary and discussion of it must precede every routine childhood vaccination because the information is frequently updated. If you are not given this information, ask for it! Asking for the information is your responsibility; getting it is your right.

MEASLES & VACCINES MUMPS & RUBELLA

WHAT YOU NEED TO KNOW

1 Why get vaccinated?

Measles, mumps, and rubella are serious diseases.

Measles

- Measles virus causes rash, cough, runny nose, eye irritation, and fever.
- It can lead to ear infection, pneumonia, seizures (trembling and stiffing), brain damage, and death.

Mumps

- Mumps virus causes fever, headache, and swollen glands.
- It can lead to deafness, meningitis (inflammation of the brain and spinal cord covering), painful swelling of the testicles in males, and rarely, death.

Rubella (German Measles)

- Rubella virus causes rash, neck fever, and arthritis (mostly in women).
- If a woman gets rubella while she is pregnant, the fetus may have a miscarriage or her baby could be born with serious birth defects.

you or your child, mumps causes more instances of being around someone who has them, they spread from person to person through the air.

Measles, mumps, and rubella (MMR) vaccine can prevent these diseases.

Most children who get their mumps shot will not get these diseases. Many more children would get them if we stopped vaccinating.

2 Who should get MMR vaccine and when?

Children should get 2 doses of MMR vaccine:

- The first at 12-15 months of age
- and the second at 4-6 years of age.

These are the recommended ages, but children can get the second dose at any age, as long as it is at least 28 days after the first dose.

Even adults should also get MMR vaccine. Immunity wanes 18 years of age or older, who was born after 1956, should get at least one dose of MMR vaccine, unless they can show that they have had either the vaccine or the disease.

Ask your doctor or nurse for more information.

MMR vaccine may be given at the same time as other vaccines.

3 Some people shouldn't get MMR vaccine or should wait

People shouldn't get their vaccine until they've had a life-threatening allergic reaction to gelatin, the antibiotic neomycin, or a previous dose of MMR vaccine.

People who are moderately or severely ill at the time the shot is scheduled should usually wait until they recover before getting MMR vaccine.

Pregnant women shouldn't want to get MMR vaccine until after they have given birth. Women should not get pregnant for 3 months after getting MMR vaccine.

- Some people should check with their doctor about whether they should get MMR vaccine, including:
 - Has HIV/AIDS, or another disease that affects the immune system.
 - Is being treated with drugs that affect the immune system, such as steroids, for 2 weeks or longer.
 - Has any kind of cancer.
 - Is taking cancer treatment with x-rays or drugs.
 - Has ever had a low platelet count (a blood disorder) ever.

People who recently had a transfusion or were in contact with someone who had all their doctor visits when they may get MMR vaccine.

Ask your doctor or nurse for more information.

4 What are the risks from MMR vaccines?

A vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of MMR vaccine causing serious harm, or death, is extremely small.

Getting MMR vaccine is much more than getting any of these three diseases.

Most people who get MMR vaccine do not have any problems with it.

Mild Problems

- Fever (up to 1 person out of 6)
 - Mild rash (about 1 person out of 20)
 - Swelling of glands in the cheeks or neck (rare)
 - Temporary joint aches (rare)
- If these problems occur, they usually go away after the shot. They occur less often after the second dose.

Moderate Problems

- Severe (lasting or lasting) caused by fever (about 1 out of 5,000 doses)
- Temporary pain and stiffness in the joints, usually in the arms or legs (rare)
- Temporary low platelet count, which can cause a bleeding disorder (about 1 out of 30,000 doses)

Severe Problems (Very Rare)

- Severe allergic reaction (less than 1 out of a million doses)
- Seizures after severe problems have been known to occur after a child gets MMR vaccine. But this happens so rarely, experts cannot be sure whether they are caused by the vaccine or not. These include:
 - Deafness
 - Long-term seizures, coma, or lowered consciousness
 - Brainstem brain damage

5 What if there is a moderate or severe reaction?

What should I do?

Any unusual conditions, such as seizures, coma, reaction, high fever or behavior changes. Signs of a

serious allergic reaction include difficulty breathing, hives or wheezing, dizziness, faintness, weakness, a rash, or swelling of the face, lips, tongue, or throat. If it occurs, would happen 1 or 2 weeks after the shot.

What should I do?

- Call a doctor, or get the shot, to a doctor right away.
- Tell your doctor what happened, the date and time it happened, and what the reaction was given.
- Ask your doctor, nurse, or health department to file a Vaccine Adverse Event Reporting System (VAERS) form, or call VAERS directly at 1-800-833-7962.

6 The National Vaccine Injury Compensation Program

If the rare event that you or your child has, a serious reaction to getting a vaccine, a federal program has been created to help pay for the care of those who have been harmed.

For details about the National Vaccine Injury Compensation Program, call 1-800-368-5822 or visit <http://www.hhs.gov/dhhs/dhpo/vhi/>

7 How can I learn more?

Ask your doctor or nurse. They can give you the vaccine package insert, or suggest other sources of information.

- Call your local or state health department's immunization program.
- Contact the Centers for Disease Control and Prevention (CDC), via our sites:
 - Call 1-800-338-2333 (English)
 - Call 1-800-338-2333 (Spanish)
- Visit the National Immunization Program's website at <http://www.cdc.gov/nip/>



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Immunization Program

Vaccine Information Statement
4/23/13-C 87000a-26
MMR1(2013)098

Figure 1-1
SAMPLE VACCINE HANDOUT: MMR

THE GOALS OF THIS BOOK

Our goals are twofold. *First*, we want to empower you to ask your healthcare provider questions about vaccines. In fact, everyone from every corner of the vaccine debate wants you to ask questions. Chances are quite high that your healthcare provider also wants you to ask.

Second, we want to give you the most recent scientific information on vaccine-preventable diseases and on the vaccines themselves. We hope you will use this book to prepare for your child's routine doctor visits. You'll soon know what shots your child is likely to receive, their possible side effects, and their benefits, so you can make your own informed decisions about vaccinating your child.

USING THIS BOOK TO FORM AND ANSWER YOUR QUESTIONS

We have designed the book for busy parents (parents are busy by definition!), breaking it into three parts.

Part One gives you background on vaccines: what you should expect from your healthcare provider's immunization services; how vaccines work with your immune system; how vaccines are developed, licensed, recommended, and finally required for school entry; how programs track vaccine side effects over the long run; how to analyze vaccine risks; and who should *not* receive specific vaccines.

Part Two discusses the specific vaccines that your child will probably need to receive before attending school.

Part Three reviews vaccines that are not *routinely* recommended for children and vaccines that *are* recommended for adolescents and adults. Finally, because you may find that new questions come to mind, the last chapter lists some organizations that you might want to contact. We believe that the single most reliable and accessible source for quick answers is the CDC hotline: (800) 232-2522.