CONSENT/PARENTAL PERMISSION FORM

Understanding how the initial encounter with influenza virus poises children for protective immunity

Principal Investigator: Jennifer L. Nayak, M.D.

This consent form describes a research study, what you may expect if you decide to allow your child to take part and important information to help you make your decision. Please read this form carefully.

The study staff will explain this study to you. Please ask questions about anything that is not clear before you agree to participate. You may take this consent form home to think about and discuss with family or friends.

- Being in this study is voluntary – it is your choice.
- If you allow your child to join this study, you can change your mind and stop at any time.
- If you choose not to take part, your child's routine medical care will not be changed in any way.
- There are risks from participating and you should understand what these mean to you / your child.

Introduction

This consent form is being given to you to invite you and your child to participate in a research study of influenza virus. Influenza is a common winter time viral infection that causes fever and upper respiratory symptoms including cough. Infants typically are first exposed to this virus through either a vaccine given as an intramuscular shot or by contracting an infection caused by this virus. Toddlers two years of age or older may also be given a vaccine that consists of extremely weakened viral particles administered into the nose. However, despite the development of an immune response following exposures, children and adults are repeatedly infected with influenza over the course of a lifetime. The goal of this study is to understand how exposure of young children to influenza by these different routes prepares their immune systems to fight off future influenza infections. Please read this form completely. It describes what you may expect to happen if you decide to let your child participate in the study. A member of the study team will explain the study to you and answer any questions you may have about the study. Participation is voluntary and if you decide not to have your child participate, he or she will continue to receive all routine medical care.

Special protections are required when research involves minors. This research has incorporated those requirements to further protect children involved in research.

This study is being conducted by Dr. Jennifer Nayak and her colleagues at the University of Rochester Medical Center.

Purpose of Study

More information is needed on how infants and children develop immunity to influenza virus, as they are at greater risk for developing severe influenza infection and tend to have weaker responses to influenza vaccination. The purpose of this study is to understand how a child's early exposure to influenza vaccine or virus prepares him or her to fight off future infections with this virus. We will learn about how immunity develops following an influenza infection or vaccination and the impact this has on future vaccine responses. The information learned may allow us to develop better vaccines against influenza virus in the future.

Why you are being asked to allow your child to participate

You are being asked to allow your child to participate in this study because he or she is either infected with influenza virus or is being vaccinated against influenza virus and is eligible for participation based on age. Two age groups of children are being recruited into this study. The first group is otherwise healthy infants who present with an illness as a result of influenza virus infection or who are going to receive the influenza vaccine as a shot to protect them against future infection. The second group of children are healthy 2 year olds who are going to receive the influenza vaccine either in their nose or intramuscularly as a shot.

Description of Study Procedures

If you agree to have your child participate in this study, your child will be followed for a maximum of 1 year, with 6 total study visits (including today's visit). At each visit we will collect medical information about your child, examine him or her, and collect a blood sample and a nasal wash. We also will ask you to record information about any illnesses that occur in a diary book that we give you and to contact us if your child develops symptoms such as a fever or cough.

- Physical exam and interview: We will ask you questions about your child's health at each study visit and again if your child develops symptoms of a respiratory illness. If your child develops an illness, we will ask you to record the symptoms of that illness in a diary and also to call us. We will ask if your child has a fever, how he or she is feeding, and whether he or she has a cough, runny nose, or congestion. If your child develops symptoms possibly consistent with an influenza infection, you will have the opportunity to bring him or her to the research unit to be examined and have a test to find out if he or she has an influenza virus infection.

- Influenza vaccination: If your child is enrolled in a vaccination group, he or she will receive the seasonal influenza vaccine as recommended. This vaccine is the standard influenza vaccine that is recommended for all children. Children between the ages of 2 and 3 years old will be randomly assigned based on chance, like flipping a coin, to receive the influenza vaccine either in the nose or as an intramuscular injection (a shot) unless there is a history of recent wheezing. If your child has a history of recent wheezing, he or she will only receive the influenza vaccine as a shot. Children between the ages of 6 and 12 months will also only receive an influenza vaccine as a shot.

  Your child will also receive their next year's seasonal influenza vaccine in the research unit. This vaccine will also be the seasonal influenza vaccine that is recommended for all children and will be given as an intramuscular injection (a shot). Your child will not receive any experimental medications or vaccines as part of this study.

- Nasal wash: We will collect nasal washes from your child. To do this, approximately one teaspoon of sterile salt water is squirted into the nose. This salt water is immediately sucked out in order to remove mucous from the nose. This sample can be used to test nasal cells for their reaction to vaccination or a viral infection.

- Nasal swab: If your child develops symptoms possibly consistent with influenza infection, we will place a soft nylon swab (like a q-tip) about ¾ of an inch into his or her nostril and slowly and gently rotate it for about 5 seconds. This will be done in each nostril to collect two swabs total. These samples will be used to

test for influenza and other viral or bacterial infections. It is very safe to collect a nasal swab and causes only mild discomfort or itching.

- Blood sample: We will collect a small amount of blood, with the amount of blood to be collected determined by your child's weight. This amount will range from about ½ teaspoon for the smallest children to about 1 tablespoon for a larger child. This blood will be collected by a venous puncture with a needle and will be used to measure how your child's immune system responds to influenza infection or vaccination.

The following information about your child's study participation will be included in your child's electronic health record:

- Documentation that your child is in this study
- A copy of your child's signed consent form

Number of Subjects

Approximately 180 subjects will take part in this study. Sixty of these children will be two year olds who receive influenza vaccine. The remainder will be infants either being vaccinated against influenza or screened for influenza infection. Some of the infants screened for influenza will not have an influenza infection and will not participate in the study further. All subjects will be recruited locally from the Rochester, NY area.

Duration of the Study

Your child's participation in the study will last for a maximum of 1 year. This will include 3 study visits over the next month and three study visits when your child again receives the seasonal influenza vaccine next fall. While many of these visits will take place in the University of Rochester's Vaccine Research Unit, some visits may be conducted as home visits if this is more convenient for you and your family.

Risks of Participation

Taking part in a research study involves possible risks and side effects. You are encouraged to talk to the study doctor or your pediatrician if you have any concerns. However, the procedures that are performed in this study are considered safe.

While there are possible risks associated with receiving the influenza vaccine, administration of this vaccine is currently recommended for all children. Thus, these risks are the same as would be experienced by your child getting the vaccine from your pediatrician as recommended. Common vaccination side effects include the development of a low grade fever or fussiness, the development a runny nose, headache, or sore throat from the intranasal vaccine, or pain, redness, or swelling at the injection site from the influenza vaccine shot.

Collection of nasal swabs and nasal wash samples can cause minor irritation, and rarely some bleeding. There are also some risks associated with drawing blood. Your child may experience some discomfort, bruising, or bleeding at the location where blood is

drawn. The use of alcohol swabbing and sterile equipment will make infection less likely. Staff experienced in the collection of these types of samples from children will be used for all study procedures.

Although we will attempt to keep all information about your child confidential, there is always the possibility that there could be a breach in confidentiality by participation in the study. Additionally, data on the expression of certain genes in immune cells generated as part of this study may be submitted to an open access data repository maintained by the National Institutes of Health. Other researchers may be able to see and use data generated as part of this study (along with that of many other study subjects), but your child's name and any other information that could directly identify him or her (such as date of birth or social security number) will not be included with this data. However, as your child's genetic information is unique to him or her, there is a very small chance that someone could trace this information back to your child. The risk of this happening is currently very small, but may grow in the future.
The study team may be notified if your child receives other health care services at URMC and Affiliates (e.g., visit to the emergency room). In addition, the following individuals may know your child participated in research:

- Staff at the University of Rochester Medical Center and its Affiliates (e.g., Strong Memorial Hospital, Highland Hospital, URMC primary care, specialist physician offices) who have a reason to access your child's electronic health record.
- Individuals who request a copy of information from your child's health record for activities such as treatment or payment (e.g., medical insurance companies, worker's compensation).

As mandated reporters, researchers are required to report information regarding potential child abuse or neglect reported by you or observed at your home during the research visit. The researcher will also report if there is a reasonable suspicion, based on information provided by you or observed during the research visit at your home, that you may present a danger of harm to others or that you may harm yourself unless protective measures are taken

Benefits of Participation
Your child will not benefit from being in this research study.

Alternatives to Participation
You may decide not to have your child participate in this study. This will not affect your child's health care in any way. Your pediatrician will advise that your child be given seasonal influenza vaccine regardless of your participation in this study.

Sponsor Support
The University of Rochester is receiving payment from the Doris Duke Charitable Foundation for conducting this research study.

Costs

All influenza vaccines given by study personnel in the research unit will be administered free of charge. However, if you opt to receive the seasonal influenza vaccine through your pediatrician's office, this will be considered the standard of care and you and/or your insurance company will be responsible for paying for this vaccine. There will be no additional cost for any of the other tests or procedures performed as part of this study.

Payments

You will be compensated for each study visit made ($25 for the first visit and $25 for each completed additional clinic visit). You will not be paid for visits that you do not complete. You will be paid up to a total of $150.00 for participation in this study.

Confidentiality of Records and Authorization to Use and Disclose Information for Research Purposes

The University of Rochester makes every effort to keep the information collected from you private. In order to do so, we will keep all information in a coded format with the code and all PHI secured on a password protected computer. Paper copies of all information will kept in a secured file cabinet. Sometimes, however, researchers need to share information that may identify your child with people that work for the University, regulators or the study sponsor.

If you have never received a copy of the University of Rochester Medical Center (URMC) and Affiliates Notice of Privacy Practices, please ask the investigator for one.

What information may be used and given to others?

The study doctor will get your child's personal and medical information. For example:

- Research records, including records on phone calls made as part of this research
- Records about your child's study visits
- Past and present medical records related to the study
- Results of medical tests

Who may use and give out information about your child?

- The study doctor and the study staff
- URMC and Affiliates

Your child's information may be given to:

- The Department of Health and Human Services
- The University of Rochester
- The Doris Duke Charitable Foundation

Why will this information be used and/or given to others?

- To do the research
- To study the results
- To see if the research was done right

If the results of this study are made public, information that identifies your child will not be used.

What if I decide not to give permission to use and give out my child's health information?
Then your child will not be able to be in this research study.

May I review or copy my child's information?
Yes, but only after the research is over.

How long will this permission be valid?
This permission will last indefinitely.
May I cancel my permission to use and disclose information?
Yes. You may cancel your permission to use and disclose your child's health information at any time. You do this by sending written notice to the study doctor. Upon receiving the written notice, the study team will no longer use or disclose your child's health information and your child will not be able to stay in this study. Information that has already been gathered may need to be used and given to others for the validity of the study.

May I withdraw my child from the study?
Yes. If you withdraw your permission to be in the study, no new health information identifying your child will be gathered after that date. Information that has already been gathered may still be used and given to others.

Is my child's health information protected after it has been given to others?
There is a risk that your child's information will be given to others without your permission.

Consent for Storage of Blood and Future Testing
After tests are done on your child's samples, we would like your permission to keep any remaining sample to use in possible future research studies. These tests may include studies to determine the expression of certain genes in your child's blood. Samples will be stored indefinitely at the University of Rochester. The stored samples will be labeled only by study subject number and will not be labeled with your child's name or initials or any other information that could identify your child readily. These samples may be shared with other investigators at this or other institutions, but will not be sold or used directly for the production of commercial products. Reports about future research done with your child's samples will not be kept in your child's health records, but may be kept with the study records or in other secure areas. This information will be kept confidential to the best of our ability. However, there is a slight risk that your child could be identified if there was a breach in confidentiality. If you decide not to allow us to keep the specimens for future use, we will destroy the samples once all tests outlined in this consent form and the data analysis are complete.

You can decide if you want your child's samples to be used for future research. Your decision can be changed at any time by notifying the study doctors or nurses in writing. Your decision about your child's samples will not affect your child's participation in this study or other studies, or your child's standard health care.

Contact for Future Studies

We may want to contact you in the future to ask if you or your child would like to participate in another clinical trial. If you agree, we would like to keep your name, address, phone number, and email address on file. This information will be kept confidential and will not be shared with other research groups. If you agree to be contacted for a future study, it does not mean that you have to be in that study. You will be given a separate informed consent form at that time. Your decision regarding future contact will not affect your child's participation in this study.

Voluntary Participation

Taking part in this study is voluntary. You are free not to have your child take part or to withdraw at any time, for whatever reason. No matter what decision you make, there will be no penalty or loss of benefit to which you are entitled. In the event that you do withdraw your child from this study, the information you have already provided will be kept in a confidential manner. For more information concerning this research or if you feel that your child's participation has resulted in any research related injury, emotional or physical discomfort, please contact Dr. Jennifer Nayak at (585) 275-5944

Please contact the University of Rochester Research Subjects Review Board at 265 Crittenden Blvd., CU 420315, Rochester, NY 14642, Telephone (585) 276-0005 or (877) 449-4441 for the following reasons:

- You wish to talk to someone other than the research staff about your rights as a research subject;
- To voice concerns about the research;
- To provide input concerning the research process;
- In the event the study staff could not be reached.

SIGNATURE/DATES

After reading and discussing the information in this consent form you should understand:

- Why this study is being done;
- What will happen during the study;
- Any possible risks and benefits to you / your child;
- Other options you may have instead of being in the study;
- How you / your child's personal information will be protected;
- What to do if you have problems or questions about this study.

Child's Name: _____ Child's Birth Date: __/__/__

Parental Permission for Child Participation

I have read (or have had read to me) the contents of this consent form and have been encouraged to ask questions. I have received answers to my questions. I have received (or will receive) a signed copy of this form for my records and future reference. I voluntarily agree to allow my child to participate in this study.

_____ _____
Parent/Guardian Name (Printed) Relationship to Child

_____ _____
Signature of Parent/Guardian Date

PLEASE INITIAL your decision about permission for future research with your child's samples below:

_____ YES, you may store my child's unused encoded samples for an indefinite period of time for future research as described above.

_____ NO, you may not use my child's samples for future research. Destroy my child's unused samples at the end of this study.

PLEASE INITIAL your decision about permission for us to contact you in the future for upcoming studies:

_____ YES, you may contact me in the future by telephone, e-mail, or postal mail to inform me of upcoming studies.

_____ NO, you may not contact me in the future regarding upcoming studies.

Person Obtaining Consent

I have read this form to the parent or guardian and/or the parent or guardian has read this form. I will provide the parent or guardian with a signed copy of this consent form. An explanation of the research was given and questions from the parent or guardian were solicited and answered to the parent's satisfaction. In my judgment, the parent or guardian has demonstrated comprehension of the information. I have given the parent or guardian adequate opportunity to read the consent before signing.

_____
Name and Title (Print)

_____ _____
Signature of Person Obtaining Consent Date