

INSPIRE Study Newsletter

Issue
#4

From our team, to your family

INSPIRE

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Editor: Ashudee Kirk

Season's Greetings from the INSPIRE Study team! Thank you for being a part of INSPIRE! This study is one of the largest, most comprehensive studies of the long-term impact of colds on healthy babies. The INSPIRE study would not be possible without your family's continued dedication. We greatly appreciate you.

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From the desk of Tina Hartert, M.D., M.P.H....

One of our favorite traditions is saying Thank You and sending holiday greetings to the 1952 families who are participating in the INSPIRE Study. This is one of the largest respiratory studies of healthy term babies assessing the impact of early life respiratory infections. This year we want to tell you about the study and some of the exciting early findings. Without you and your continued dedication to this study, this would not be possible.

The INSPIRE Study was designed to help understand how routine upper respiratory infections (colds) that all babies get in the first year of life impact their future childhood health. The babies in the INSPIRE study were followed during their first winter after birth (2012-13 and 2013-14) for "colds" or respiratory infections. The winter months are when we see the highest rates of respiratory viruses and colds. The major cause of upper respiratory illness, as well as lower respiratory illness, in infants is viruses.

Below, we summarize the results of the viruses we identified during INSPIRE Study infants' respiratory illnesses. You may remember these were the sick visits we did between November and March of your child's first year in the study. Nearly 21% of babies enrolled in this study had respiratory syncytial virus (RSV), 28% had Human Rhinovirus (HRV), 7% had Human Enterovirus (HEV), and the remaining included infection with a smattering of other viruses, or no virus was found.

As respiratory syncytial virus (RSV) was one of the most common viruses identified among children in the study, we thought we would highlight information about this very common infant infection. In climates, such as that in Tennessee and most of the United States, RSV circulates and causes illness only during the fall and winter months. In the United States, 60% of infants are infected during their first fall-winter RSV season following birth, and nearly all children have been infected by 2 to 3 years of age. In infants, RSV causes both upper respiratory tract infections (colds) and lower respiratory tract infections (bronchiolitis and pneumonia). RSV is the most common cause of lower respiratory tract infection resulting in hospitalization during infancy and early childhood. While there are active efforts for development of an RSV vaccine, there is currently no vaccine for healthy term infants, and the only treatment is supportive care, which may include oxygen if it is needed in severe cases.

-Tina Hartert, M.D., M.P.H, is the Principal Investigator for the INSPIRE Study-

Happy Holidays

Achoo! What Are You Allergic To??

An allergen is something that we touch or inhale that causes our immune system to overreact. For example, you may experience sneezing, watery eyes, runny nose, puffiness, hives, itchiness, or difficulty breathing when exposed to an allergen. A skin test is a way to find out what someone is allergic to by testing several possible allergens all at once.

At the INSPIRE 3-year old study visit, we test your child for local reactions to common airborne allergens. This allergy testing involves testing the skin on your child's back to eight local allergens, including tree and grass pollen, pet dander, mold, and household pests. After 15 minutes, any red bumps that swell on your child's back will show that your child may be sensitized to or react to that particular allergen. Allergies (aka hay fever) are the combination of symptoms plus a reaction to the allergen. Just because your child reacts to the allergen does not mean that s/he has hay fever, if s/he does not have any symptoms when exposed to the allergen. Some INSPIRE families have already had their 3-year old study visits and have received their children's allergy skin test results. Here, we give you a few facts about each allergen and tips on how you can reduce your child's exposure if s/he had a positive reaction to that allergen.



YEAR-ROUND ALLERGENS

There are lots of things in your home which can cause allergic symptoms if you are sensitive to them.

Cat: Pets are one of the most common causes of year-round allergies, with cats causing the biggest response. Both the skin (dander) and saliva of cats can cause an allergic reaction.

Alternaria (mold): Alternaria is a very common fungus that grows all over the world.

Dust Mite: House dust mites are microscopic and live in everyone's home. They live on organic debris, such as shed skin cells.

Cockroach: The saliva, feces and bodies of cockroaches can all cause a reaction in people that are allergic. Since cockroaches can be found in many urban homes in nearly any climate, allergies to them are common.

SEASONAL ALLERGENS

Seasonal allergies are very common in the southern U.S. because we have long warm seasons, high humidity and mild winters. Go to this website for more information: <http://www.aafa.org/display.cfm?id=9&sub=33>

Grass: Allergies to grass pollen are very common. In the southern United States, Tennessee included, grass allergy season is quite long, lasting potentially from February to November.

Oak Tree: In Tennessee, tree pollen allergies are most common in March through May when the trees are flowering. This is the yellow pollen that covers your car in the springtime. Other trees that can cause allergies in the southern U.S. include walnut, maple and birch.

(Adapted from article by Chantel Sloan, PhD.)

Follow-up Study Visits

- **3-year Allergy Testing** - If you have not had your child's 3-year allergy testing visit, please call us at 615-875-BABY (2229), or toll-free at 1-888-664-0505, to schedule your child's allergy testing appointment.
- **2-year Study Questionnaire** - If you have not had your follow-up phone interview when your child is around two years old, please call 615-875-BABY (2229), or toll-free at 1-888-664-0505. You may also send an e-mail to INSPIRE@vanderbilt.edu to schedule the interview at a time that best fits your schedule.
- If there is no answer when you call, please leave a message with your name and phone number(s), and we will call you back!
- **4-year Study Questionnaire** - The INSPIRE study staff will contact you around your child's fourth birthday to conduct your 4-year visit interview.

How to Clear Your Home of Allergens & Irritants

By Patricia "Cookie" Minton, RN

Americans spend up to 90% of their time indoors. Indoor allergens and irritants can play a very important role as triggers for asthma. Reduce exposure to items that you are allergic to by following the tips below.

Cockroaches and other pests leave body parts, secretions and droppings in areas where food and water are found. 

- ◆ Keep counters, sinks, tables, and floors clean.
- ◆ Clean dishes, crumbs, and spills.
- ◆ Store food in airtight containers.
- ◆ Cover trash cans.

Molds can grow indoors when mold spores land on wet or damp surfaces. They are mostly found in the bathroom, kitchen and basement.

- ◆ Use exhaust fans or open a window in areas where there is a lot of moisture.
- ◆ If you see mold, clean it up with soap and water. 
- ◆ Dry damp or wet items within 1 to 2 days.

Secondhand smoke is smoke from a burning cigarette, pipe or cigar or the smoke breathed out by a smoker. Smoke is an irritant to people.

- ◆ Don't smoke in your home or car. 
- ◆ Don't let anyone smoke near your child

Dust mites are tiny bugs you cannot see. They live in sheets, blankets, pillows, mattresses, soft furniture, carpets, and stuffed toys.

- ◆ Wash bed sheets and blankets once a week. Dry completely.
- ◆ Use dust-proof covers on pillows and mattresses.
- ◆ Wash stuffed toys. Dry completely.
- ◆ Vacuum carpets, rugs and furniture often. 

Pets, such as dogs and cats, spread allergens from their saliva, urine, dead skin and hair.

- ◆ Consider keeping pets outdoors or even finding a new home for your pets, if allergic.
- ◆ If you are unable to keep pets outdoors, keep them out of the bedroom and other sleeping areas, and keep the doors closed.
- ◆ Keep pets away from fabric-covered furniture, carpets, and stuffed toys.



RESOURCES

Websites for information about allergen avoidance:

http://www.aaaai.org/allergist/liv_man/trigger_avoidance/Pages/default.aspx
http://www.worldallergy.org/professional/allergic_diseases_center/allergen_avoidance/

Tennessee Tobacco Quit Line: IT'S FREE!!

Call 1-800-QUIT-NOW (1-800-784-8669).

You may also join the program online at: www.tnquitline.com.

Quitting smoking is a hard task. But, studies show that people using a help program have a greater chance at success. Now, you can sign up for the FREE Tennessee Tobacco Quit Line program to help you quit for good.

Work with a FREE Quit Coach. Learn to deal with tobacco cravings and other challenges.

Our Heartfelt Goodbye to Nurse Patricia “Cookie” Minton

By: Ashudee Kirk

Patricia Minton has been called Cookie since before her birth. She is a Nashville native and wanted to be a nurse since she was a little girl, having been raised by an R.N. mother who loved nursing so much that she didn't retire until the age of 75. Cookie attended St. Mary's School of Nursing in Knoxville, TN, and went on to become a charge nurse at the age of 21. In 1975, she came to Vanderbilt to work in research, planting the seeds for what would eventually become standards of care in the modern-day Neonatal Intensive Care Unit where care of preterm infants has been revolutionized (NICU). In 2002, Cookie began her work with Tina Hartert, M.D., M.P.H., as a research study coordinator and fell in love with asthma and respiratory research. Dr. Tina Hartert commented that, "Cookie is the most wonderful co-worker anyone could ever ask for, and she has one of the most loving hearts of anyone you'll ever meet. She is a devoted and passionate researcher, caregiver, asthma educator, leader, and friend. She can tell interesting stories of road trips to find lost study participants, from encounters with the family pit bull while drawing a baby's blood to navigating an 800-mile trip into rural Kentucky to find participants in our studies. Cookie will teach you to love your work, as it's hard not to love working with her, but she never forgets that the reason we do what we do is to cure childhood diseases. While you work, though, she'll always make you laugh."



Cookie at allergy testing training

I know we have all grown to love Nurse Cookie throughout the INSPIRE Study; she is truly one of a kind. We would like to wish our heartiest congratulations and best wishes to Cookie as she enters retirement. As a farewell we interviewed Cookie so that everyone in the INSPIRE study can get to know her a little better!



Cookie holding a study baby

how much faith she has had in me. It was virtually impossible not to succeed with her leading the way.

How long have you been a nurse? 45 yrs.

How long have you been with Vanderbilt? 40 yrs. *She is loyal to all things Vanderbilt (Go 'Dores).*

What do you think has had the greatest impact on driving your nursing career? *Literally falling into a research nursing position. From the very beginning I knew that this was the kind of nursing that I wanted to do.*

What is your most memorable research moment? *Receiving the Vivien Thomas Award for Excellence in Clinical Research. (This award recognizes distinction in conducting clinical research.)*

What is the greatest advice you would like to leave? *Love what you do and...PATIENCE, PATIENCE, PATIENCE!*

What in the world are you going to do with all your free time? *My husband, John, and our sweet boxer, Maxine, are going to travel America.*

Everyone, please join us in wishing Cookie congratulations on her well-deserved retirement! May you have days full of laughter and happiness...



Maxine
Cookie's beloved Boxer

Is It a Cold or Flu? Symptoms at a Glance Chart:



The flu virus typically spreads from **October to May**, and flu season generally peaks in **January or February**. It usually takes a week or two for most people to recover from the flu, but this illness can cause complications in young children, the elderly, and people with chronic health problems (asthma, diabetes, heart disease).

When someone isn't feeling well, it can be hard to tell when it's just a little cold or when it's the flu. This chart shows some of the basic differences between colds and the flu.

Symptom	Cold	Flu	Allergies
Fever	Fever is rare.	Fever is common	Fever is rare.
Coughing	A hacking, productive (mucus-producing) cough is often present.	A non-productive (dry and hacking/ non-mucus producing) cough is often present.	May have coughing.
Aches	Slight body aches and pains can be present	Moderate body aches are common.	No body aches.
Stuffy Nose	A stuffy nose commonly present with a cold.	A runny nose is commonly present.	A stuffy congested nose commonly present.
Chills	Chills are not common.	Chills are mild to moderate.	Chills are not common.
Tiredness	Tiredness seems to be fairly mild.	Tiredness is moderate and more likely referred to as a lack of energy.	Exhaustion could be associated with allergies.
Sneezing	Sneezing is commonly present.	Sneezing is commonly present.	Sneezing is commonly present.
Symptom onset	Symptoms tend to develop over a few days.	Symptoms tend to develop over a few days and include flushed face, loss of appetite, dizziness, diarrhea and/or vomiting/nausea.	Persistent symptoms when allergen is present.
Headache	A headache is not common.	A headache is fairly common.	May have associated headache.
Sore Throat	Sore throat is commonly present.	Sore throat is commonly present.	Sore throat may be associated with cough.
Chest Discomfort	Chest discomfort is mild to moderate.	Chest discomfort is moderate. <u>If it turns severe, seek immediate medical attention!</u>	Only when extreme cough is present.

Adapted from: Is It a Cold or the Flu? (2008, November) U.S. Department of Health and Human Services National Institutes of Health National Institute of Allergy and Infectious Diseases.

Tips for Flu Season Prevention and More...

Take time to get a flu vaccine.

*The flu vaccine cannot give you the flu.

- It is recommended that a yearly flu vaccine is the first and most important step in protecting against flu viruses.
- While there are many different flu viruses, a flu vaccine protects against the three or four viruses that research suggests will be most common.
- Flu vaccination can reduce flu illnesses, doctors' visits, and missed work and school due to flu, as well as prevent flu-related hospitalizations and deaths.
- Everyone 6 months of age and older should get a flu vaccine as soon as the current season's vaccines are ready.
- Vaccination of high risk persons is especially important to decrease their risk of severe flu illness.
- People at high risk of serious flu complications include children, pregnant women, people with chronic health conditions like asthma, diabetes or heart and lung disease and people 65 years and older.
- Vaccination is also important for health care workers, and other people who live with or care for high risk people, to keep from spreading flu to those at high risk.
- Children younger than 6 months are at high risk of serious flu illness, but are too young to be vaccinated. People who care for them should be vaccinated instead.

Take everyday preventive actions to stop the spread of germs.

- Try to avoid close contact with sick people.
- If you are sick with flu-like illness, it is recommended that you stay home for at least 24 hours after your fever is gone, without the use of a fever-reducing medicine, except to get medical care or for other necessities.
- While sick, limit contact with others as much as possible to keep from infecting them.

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- Clean and disinfect surfaces and objects that may be contaminated with germs like the flu.

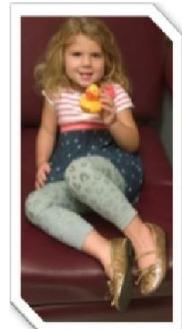
Take flu antiviral drugs if your doctor prescribes them.

- If you get the flu, antiviral drugs can treat your illness.
- Antiviral drugs are different from antibiotics. They are prescription medicines (pills, liquid or an inhaled powder) and are not available over-the-counter.
- Antiviral drugs can make illness milder and shorten the time you are sick. They may also prevent serious flu complications. For people with high risk factors, treatment with an antiviral drug can mean the difference between having a milder illness versus a very serious illness that could result in a hospital stay.
- Studies show that flu antiviral drugs work best for treatment when they are started within two days of getting sick.
- Flu-like symptoms include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Some people may also have vomiting and diarrhea. People may be infected with the flu and have respiratory symptoms without a fever.

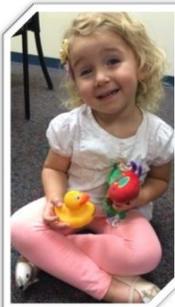
*Visit CDC's website, <http://www.cdc.gov/>, to find out what to do if you get sick with the flu and how to care for someone at home who is sick with the flu.



Our INSPIRE Study Community



Best Wishes for the New Year!



Nurse Theresa turns 40!
and is serenaded by Nashville's
finest Firefighters...



Happy Holidays





How does your body keep itself healthy?

The **MICROBIOME** is the normal bacteria, viruses, and fungi that live in and on our bodies. These "healthy" organisms can keep other germs from making us ill. The **IMMUNE SYSTEM** is also, how we fight off infection and handle intruders.

Color the intruders!



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INSPIRE Word Search

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INSPIRE Staff Allergy Test Training

