

# INSPIRE Study Newsletter

*From our team, to your family*



Volume #3

December 2014

## Cold or Flu?

Symptoms can be tricky. Use this chart to help figure out what illness your child might have

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## Year 3 Visit

What you can expect at your upcoming INSPIRE follow-up visit

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## RSV Season

Watch how this illness spreads throughout the winter months

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Editor: Alexandra Connolly

## Flu Season Prevention Tips

Adapted from: Tips for Preparing for the Flu Season. (2012, September).  
*Pulmonary Reviews*, Page 11.

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).

**Here are some tips to help your family prepare for flu season:**

### Flu vaccination is the best protection

**Most people older than 6 months should get vaccinated every flu season.** Talk to your healthcare provider about getting vaccinated

### Early immunization is the most effective

However, it's not too late to get your flu shot in December or January!

### Vaccinations are important for high-risk populations

The elderly, pregnant women, people with chronic diseases or weakened immune systems, people living in long-term care or group homes, and healthcare workers are at higher risk for getting the flu.

### Pregnant women should receive vaccine by injection only

Vaccine nasal spray is not approved for pregnant women. If you are expecting, the injection will protect you and also provides some protection to your child after birth. Contact your healthcare provider if you have any flu-like symptoms.

### The flu vaccine cannot give you the flu, but you may have some side effects

Side effects are mild and short-term and may include soreness or redness at the injection site, low-grade fever, and aches.

### Every day steps

- Frequently wash hands with soap and water
- Cover nose and mouth when sneezing or coughing
- Avoid touching eyes, nose, and mouth
- Avoid contact with sick people

### A healthy lifestyle makes you less vulnerable to getting the flu

- Eat fruits and vegetables
- Drink lots of fluids
- Regular exercise
- Plenty of sleep

## Greetings!

During this time of year, we enjoy reconnecting with the families that participate in the INSPIRE study. Over 1900 families across middle Tennessee continue to make important contributions to our study, as we discover how respiratory infections during the first year of life impact future childhood health. The MAP on Page 4 shows where our INSPIRE families are located throughout Middle Tennessee. 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. Thank you for being a part of INSPIRE!

# Symptom Chart: COLD or FLU?

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

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.

SYMPTOMS	COLD	FLU
Fever	Rare	Usually high (100-102°F or higher) Lasts 3 to 4 days
Headache	Rare	Common
Aches + Pains	Slight	Usual Often severe
Fatigue + Weakness	Sometimes	Usual Can last 2 to 3 weeks
Exhaustion	Never	Usual At the beginning of the illness
Stuffy Nose	Common	Sometimes
Sneezing	Usual	Sometimes
Sore Throat	Common	Sometimes
Chest Discomfort + Cough	Mild to moderate	Common Can become severe
TREATMENT	Antihistamines Decongestants Nonsteroidal anti-inflammatory medicines	Antiviral medicines prescribed by healthcare provider
PREVENTION	Wash hands often with soap and water Avoid contact with anyone with a cold	Annual vaccination Antiviral medicines prescribed by healthcare provider
COMPLICATIONS	Sinus congestion Middle ear infection Asthma	Bronchitis Pneumonia Can worsen chronic conditions



In this podcast about Respiratory Syncytial Virus (RSV), Dr. Eileen Schneider of the Centers for Disease Control and Prevention (CDC) discusses this common virus and offers tips to prevent its spread.

Created: 2/4/2013 by National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases (DVD). Date Released: 2/13/2013.

<http://www2c.cdc.gov/podcasts/player.asp?f=8627006>

# WHAT TO EXPECT: The 3-Year Visit

By Robert Valet\*, M.D.



## WHAT IS THE 3-YEAR VISIT ALL ABOUT?

As part of your 3-year old visit for the INSPIRE study, we will test your child for common airborne allergens: cat, dog, dust mite, cockroach, selected plants, and an important type of mold. Generally, we will do this by skin testing. We will use devices called Quin-Tips to poke the skin on your child's back. These feel like fingernails on the skin, and are not painful, like a shot. The Quin-Tips will introduce a small amount of each allergen onto your child's skin. Tests are measured after 15 minutes, so we can give you results right away! If your child is **sensitized** to any of the items tested, that spot becomes raised, red, and itchy, like a mosquito bite. We can apply an anti-itch cream to any positive reactions, and they will feel better in about a half hour. If skin testing is not possible, we can draw your child's blood to test for the same allergies.

## WHY ARE WE DOING ALLERGY TESTING?

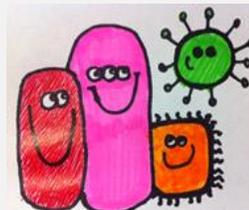
This testing is very important to help us learn how early childhood allergies and early childhood infections may affect asthma. We are also pleased that we can provide this information to our families as part of the study, to learn if your child may have developed any respiratory allergies to these common airborne allergens.

## HOW DO YOU PREPARE FOR THIS VISIT?

To prepare for this visit, please try not to give your child any antihistamines for a week prior to testing (for example, Benadryl/diphenhydramine, Claritin/loratadine, Zyrtec/ cetirizine, Allegra/fexofenadine, or over the counter cold medications). Antihistamines can block your child's skin from developing any positive reactions to the skin testing. If your child does need to take antihistamines, please do keep your study visit appointment. We can draw your child's blood to test for the same allergies. The blood will be sent to the lab for allergy testing (this is not affected by antihistamines). We will provide you with those results when they return from the lab.

\*Dr. Rob Valet is an Assistant Professor in the Allergy, Pulmonary and Critical Care Medicine Division of the Department of Medicine at Vanderbilt. He is an investigator on the INSPIRE Study and an expert in the field of pediatric allergies. Dr. Valet lives in Nashville with his wife and three sons.

## WHAT IS THE MICROBIOME?



The microbiome is simply the normal bacteria, viruses, and fungi that live in and on our bodies. These "healthy" organisms can keep other germs from making us sick. The human digestive tract gets a lot of help from good bacteria that live inside of us. These amazing organisms help us break down the food that we eat and absorb vitamins and minerals. Stress, medications, and the foods we eat may all affect the microbiome. As researchers continue to study the microbiome, we learn more about how it might be linked to certain medical conditions, including allergies, immune diseases, and even obesity. The INSPIRE Study Team will investigate how a child's microbiome might change after respiratory illness and how changes in the microbiome may play a role in children's respiratory health.

Contact us: [INSPIRE@vanderbilt.edu](mailto:INSPIRE@vanderbilt.edu) ❖ (615) 875-BABY (2229) ❖ Toll Free: 1-888-664-0505

# THE BIG PICTURE: OUR INSPIRE FAMILIES

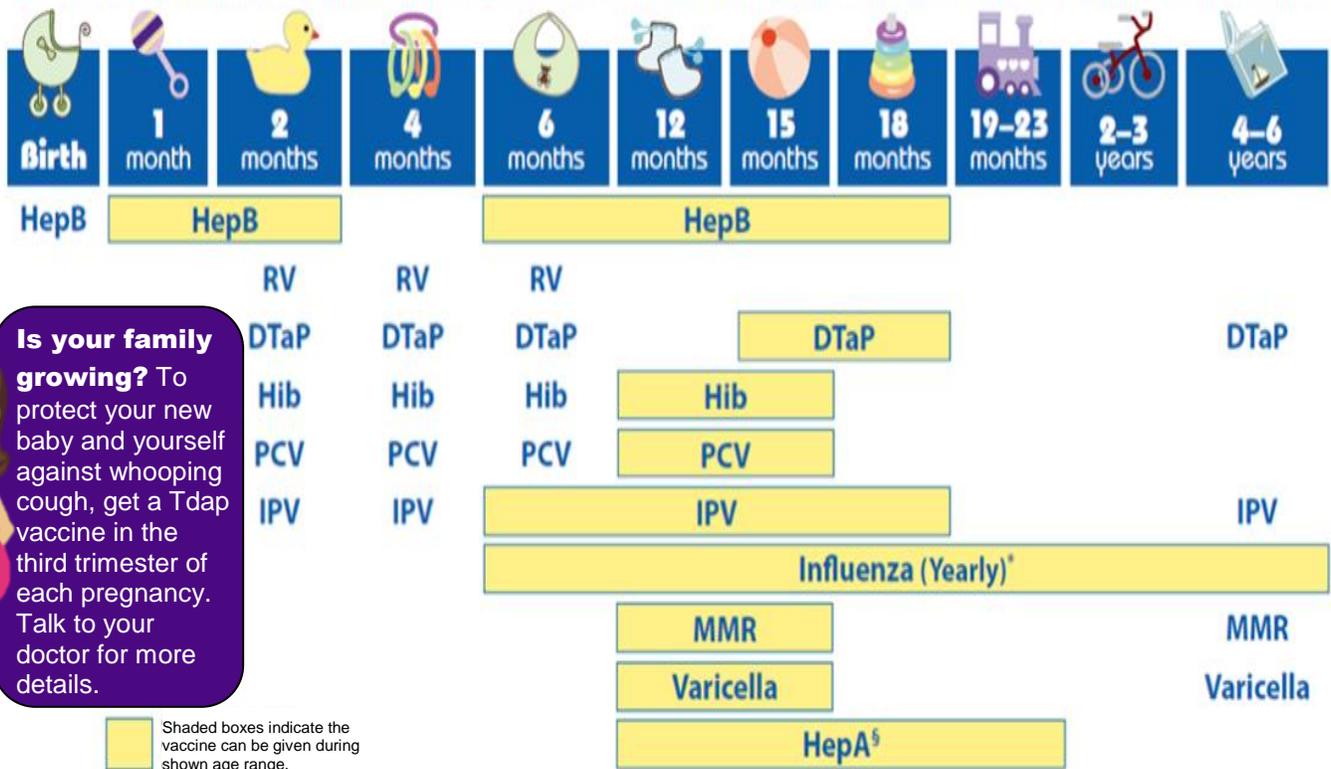


# IMMUNIZATION CHART

Everyone over the age of 6 months should receive a flu shot this season. Additionally, it's very important that children, especially infants and young children, receive all of the recommended immunizations. We have record or near record low levels of vaccine-preventable childhood diseases in the United States. Take a look at the immunization chart below and talk with your child's healthcare provider for more information.

*This schedule has been approved by the Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP), and the American Academy of Family Physicians (AAFP).*

## 2014 Recommended Immunizations for Children from Birth Through 6 Years Old



**If your child misses a shot, you don't need to start over, just go back to your child's doctor for the next shot. Talk with your child's doctor if you have questions about vaccines.**

\* Two doses given at least four weeks apart are recommended for children aged 6 months through 8 years of age who are getting a flu vaccine for the first time and for some other children in this age group.

§ Two doses of HepA vaccine are needed for lasting protection. The first dose of HepA vaccine should be given between 12 months and 23 months of age. The second dose should be given 6 to 8 months later. Hep A vaccination may be given to any child 12 months and older to protect against HepA. Children and adolescents, who did not receive the HepA vaccine and are at high-risk, should be vaccinated against HepA.

# MAPPING RSV SEASON

Respiratory Syncytial Virus (RSV) can cause upper respiratory infections, such as colds, and lower respiratory tract infections, such as pneumonia and bronchiolitis.

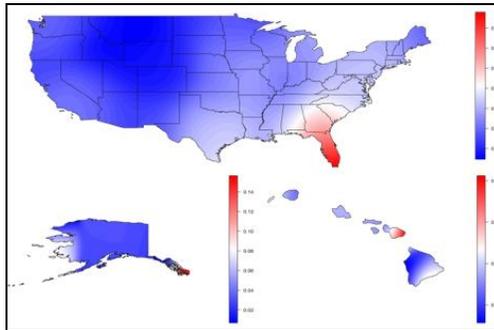
Bronchiolitis is inflammation of the small airways in the lung. During the winter virus season, RSV is the most common cause of bronchiolitis in children under 1 year of age.

The timing and severity of RSV season varies by location from year to year, but infant bronchiolitis cases occur most often between November and March.

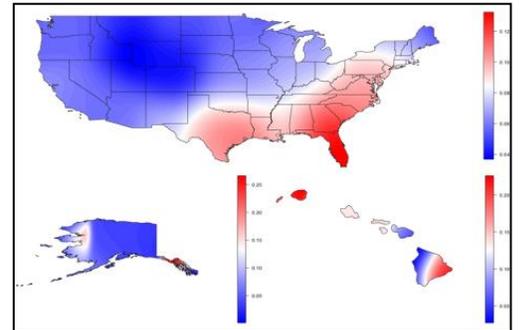
Adapted from: Sloan C, Lee R, Gebretsadik T, Michel A, Berrett C, Heaton M, Sicignano N, Hartert T. Spatiotemporal Patterns Of Winter Virus Season Bronchiolitis In A Nationwide US Infant Population. (2014)

These maps show the proportions of bronchiolitis cases occurring in each month of RSV season among infants less than 6 months old, from 2003 to 2013. Each map has its own scale.

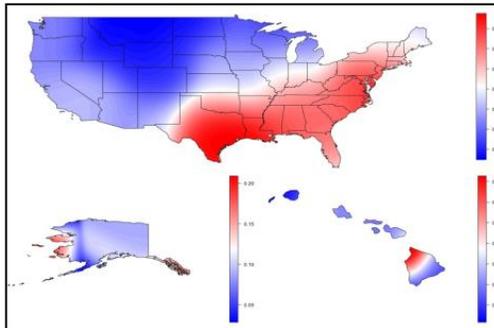
October



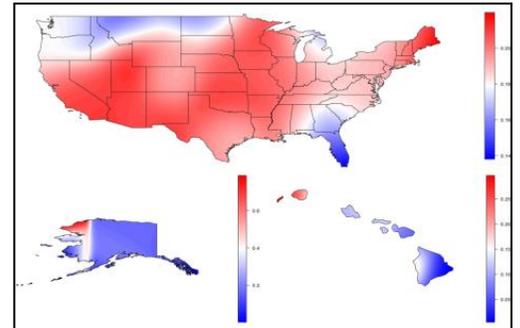
November



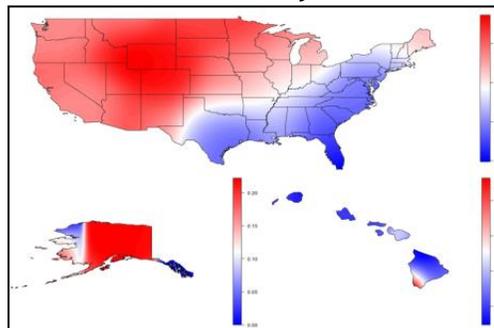
December



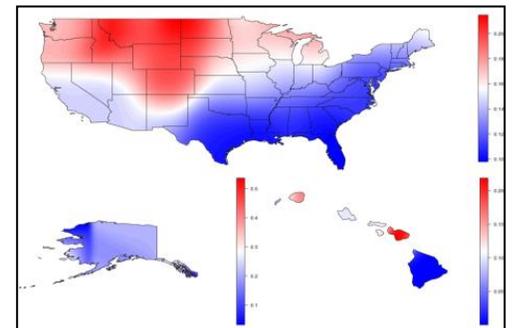
January



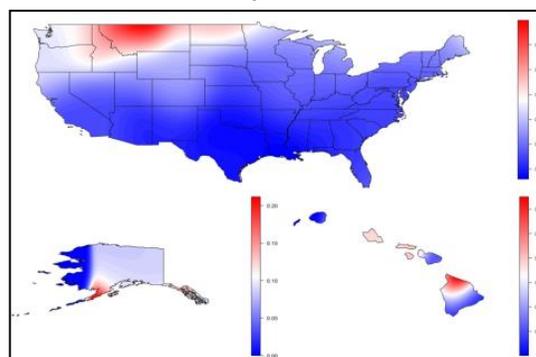
February



March



April



# A DAY IN THE LIFE OF “THE DYNAMIC DUO”!

Around the halls of the INSPIRE study, Research Analysts Lauren and Alexandra earned the nickname “The Dynamic Duo”. The tasks of this duo change every day. Lauren and Alexandra watch the clinic calendar to see which participants are coming to their check-ups. Lauren enjoys catching up with moms and dads. “I love hearing updates about all of the little babies from the parents. It doesn’t matter if it’s my baby [infant she enrolled in the study] or not.”

Along with the INSPIRE nurses, Research Analysts see participants at their check-up appointments and complete 1-Year and 2-Year Study Visits. “Some of our participants enrolled in the study as tiny babies at 2 weeks of age. It is astonishing, for all of us, to catch up with the INSPIRE kids at their follow-up visits and see how much they’ve grown” says Alexandra. Some days, the duo spends time contacting parents by phone to complete a 2-Year survey, schedule INSPIRE follow-up visits, or remind families about wipe kits.

Both members our Dynamic Duo have projects outside of their responsibilities in the clinic. Lauren designed a new logo for the Center for Asthma Research. Alexandra sends birthday cards by e-card and by mail for our study kids’ birthdays. As Research Analysts, they travel to each of the study sites clinics and have the opportunity to work with all of the INSPIRE study team members. They both appreciate the variety each day that the INSPIRE study brings!



**the  
DYNAMIC DUO!**

**RESOURCES** Call the Tennessee Tobacco QuitLine at  
1-800-QUIT-NOW (1-800-784-8669).

You may also join the program online at [www.tnquitline.com](http://www.tnquitline.com).  
**IT’S FREE!!**

It’s hard to quit smoking. But studies show that people who use a program really do better. 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.

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