

DO YOU KNOW THE FLU?



A Flu Education Resource
for Healthcare Professionals

SEPTEMBER

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Dear Healthcare Professional,

Today, you have an opportunity to make a choice that could save a child's life – deciding to proactively speak with his or her parent about the importance of an annual influenza vaccination.

It's flu season. Yes, flu — that dreaded, three letter word that is often overlooked for what may be considered “more serious” conditions or just busy schedules. However, what's important to *know* is that while flu can be serious for everyone, it's particularly concerning for children, including healthy children. ***Did you know*** that in the United States, the Centers for Disease Control and Prevention (CDC) estimate that since 2010, flu-related hospitalizations in children five years of age and younger ranged from 7,000 to 26,000 cases per year?¹ On average, more than 100 children in the United States die due to the flu each year.² These are surprising statistics about a vaccine-preventable disease.

In this information-overloaded world that we live in, parents are often inundated with confusing information about health care decisions. Through ***Do You Know the Flu?***, our organizations aim to reinforce the important role that healthcare professionals have in helping to educate parents about something that is so simple and yet vitally important -- the decision to vaccinate their children (6 months of age and older, with rare exception, as per the recommendation of the CDC) against the flu.¹ In fact, a recent study published in *Pediatrics* was the first of its kind to demonstrate that annual flu vaccination significantly reduced a child's risk of dying from the flu.^{2,3}

We hope you find this flu resource, which includes important information for both healthcare professionals and parents, informative and helpful. ***Remember:*** a flu vaccination not only helps protect the child, but also helps reduce the spread of disease to others with whom he or she may come in contact each day.

Thank you for helping us fight this serious and potentially deadly disease!

Sincerely,



Serese Marotta
Chief Operating Officer
Families Fighting Flu



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Perspectives from a Pediatric Nurse Practitioner

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Member Expert, National Association of Pediatric Nurse Practitioners

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As a pediatric nurse practitioner, I often hear people say, “Oh, it’s just the flu,” perhaps confusing influenza with something much less serious, like the stomach bug or the common cold. Having worked 30 years in a children’s hospital, the number of tragic influenza stories starkly reminds me that influenza is not trivial and can be deadly. And that’s why healthcare professionals are so important in the fight against flu. We need to remind our patients that influenza (flu) is serious and potentially devastating. On average in the U.S., more than 100 children die every year from flu. That’s why I believe the words “just” and “flu” shouldn’t be in the same sentence, unless it’s to say, “I just got my flu vaccine.”

As healthcare professionals, we know annual vaccination is the first and most important step in protecting children against influenza. A study published in *Pediatrics* (April, 2017; Flannery et al.) showed that influenza vaccination reduced the risk of flu-associated death by 51 percent among children with underlying high-risk medical conditions and by 65 percent among healthy children.

Similarly, where I work at Children’s Hospital of Minnesota, we recently completed an analysis comparing risk factors for severe influenza over three influenza seasons in Minnesota (2013-2016). We found children of all ages, with and without underlying medical conditions, can get severe influenza. Severe influenza was higher in those children who were unvaccinated.

Influenza vaccination coverage decreases as children get older. Our goal as healthcare professionals is to increase coverage for children 6 months of age and older, as every child deserves to be protected. Yes, older children are busy, but too many hospital ICU stories start with “She/he was getting dressed for practice and just suddenly became so ill.” So please encourage parents to make flu vaccination appointments a family priority.

Although their personal protection is reason enough, it’s not just about the children. If children get the flu, they have the potential to expose everyone around them. Healthcare professionals should consider every visit “a vaccine visit” to assess their patients’ flu vaccination status. Also, remind parents that it’s important for them to be vaccinated, too, to help protect themselves and their children.

It is our shared responsibility to #FightFlu to help keep our children and our communities safe and healthy. Let’s make annual influenza vaccination a routine part of childhood healthcare. I challenge us as parents and healthcare professionals to ensure that as many children as possible get vaccinated this season, and every season.

Did You Know

Flu Can Put a Healthy Child in the Hospital – Three Hospitals to Be Exact

The Miller Family Story



On December 18, 2012, 5-year-old Caroline came home from school with the sniffles and a mild cough. Caroline had mild asthma and occasionally used a nebulizer, but as the evening progressed, her breathing became more labored than usual and her parents contacted the pediatrician. Their doctor recommended alternating doses of Caroline's asthma medications and told her parents to stay in touch. Unfortunately, by 1 a.m. there was no real improvement – in fact, her condition had worsened.

Caroline's chest heaved as though she were running. After consulting again with the pediatrician, her parents took Caroline to the local hospital as a precaution. Within 48 hours of her initial symptoms of coughing and congestion, Caroline was rushed between three different hospitals – taking the “flight for life” to reach the third and final hospital, the Children's Hospital of Philadelphia (CHOP)— in order to save her life.

At CHOP, the list of what Caroline was facing was long and frightening. Flu, pneumonia, severe sepsis, septic shock, hypoxemia, and impending cardio-respiratory failure. Her small body was flooded with antibiotics – everything and anything to help her fight off the infections ravaging her lungs. Caroline would remain in the CHOP pediatric intensive care unit in a drug-induced coma, intubated, and on a ventilator for two weeks.

On Christmas Day, Caroline's condition started to take a clear turn for the better. Each day between Christmas and New Year's Day there were small signs of progress: the chest x-rays showed signs of clearing in Caroline's lungs; her kidneys were functioning more normally;

and her heart was beating as it should. Caroline slowly fought her way back and finally, on December 30, Caroline was taken off the paralytics and removed from the respirator. For the first time in two weeks Caroline spoke: she wanted a soft pretzel and a popsicle. Never before had a simple request for snacks brought such joy! Caroline was able to leave CHOP a week later.

Before getting sick, Caroline had been very active, fit and healthy. She swam and participated in gymnastics weekly. She had been vaccinated against the flu every year except this particular year. The vaccine wasn't readily available before the beginning of school and once the busy school year began, it fell off the “radar.” Caroline's mother, Jennifer, says, “The fact that we neglected to make it a priority was the biggest mistake I've ever made as a parent. That mistake and lack of judgment nearly stole my child's life and has changed our entire family's life forever.”

Did You Know

Flu Can Take the Life of a Healthy, Athletic Teenager in Just Days

The Booth Family Story



On January 12, 2011, previously healthy, athletic and strong 17-year-old Austin woke up feeling ill. His mother gave him some medicine and he went to school. Austin made it through the day, but by basketball practice that afternoon he was sent home by his coach who could tell Austin was not feeling well. Austin's parents thought that he might have the flu so they gave him some more medication and lots of fluids.

The next day, Austin stayed home from school. By mid-morning he had coughed up blood so his mother called the doctor and brought him in to be seen right away. Once the doctor saw Austin he immediately sent him to the emergency room. Within a few hours, Austin was placed on a ventilator to help him breathe. That was the last time Austin was awake and the last time his mother spoke to him.

Austin was airlifted to St. Mary's Hospital in Grand Junction, Colorado. It was a fight for his life every second of every day from then on. Austin was strong, but he had what the doctors called "the perfect storm." The flu progressed to pneumonia and Austin was also found to have methicillin-resistant *Staphylococcus aureus* (MRSA). It was more than his body could fight. On January 17, 2011, Austin died in the hospital with his parents and family at his side. Austin had not been vaccinated against the flu.

Austin's parents wish they could rewind to before their nightmare began. The first thing they would do is get their children and themselves vaccinated against the flu.

Now Austin's mother, Regina, is a flu vaccine advocate. She encourages all parents to teach their children everything they can do to help prevent spreading germs, like covering their mouth with a tissue when they sneeze or cough and washing their hands. But, most importantly, she encourages everyone to get vaccinated against the flu every year.



You Know the Benefits of Annual Flu Vaccination – Make Sure Parents Know Them, Too

It's no surprise, you will likely encounter “vaccine-hesitant” parents who may either refuse the flu vaccination for their child/children or who say that today is not the “right” or “convenient” time. This is a critical opportunity for you, the healthcare professional, to:

- ✓ Educate parent(s) about the benefits of an annual flu vaccination and the potential consequences if they choose not to vaccinate their child/children, which can include hospitalization, time lost from school/work, financial costs and even death.
- ✓ Answer their questions/concerns about the flu vaccine, including side effects, safety or effectiveness in easy-to-understand language.
- ✓ Share our family stories (on pages 5 & 6) or stories from your own practice to provide “real life” examples of the seriousness of the flu, particularly for children.
- ✓ Underscore to parents that everyone plays a key role in helping to reduce the spread of flu by getting vaccinated. We call it “**community immunity**” – the more people who are vaccinated directly impacts the spread of the flu throughout our communities. This is particularly important for people in high-risk groups such as babies younger than 6 months old who are too young to receive a flu vaccination, people with compromised immune systems and pregnant women.

Research shows that a strong recommendation for annual flu vaccination from healthcare professionals is an important factor to improving vaccination rates. Most adults do believe in the importance of vaccination, though they need an annual reminder to actually do it.¹³

How Well

DO YOU
KNOW THE  FLU?

Test Your Flu Knowledge

1. The Spanish Flu of 1918 killed an estimated _____ million people and is ranked as one of the deadliest outbreaks in history.⁴
2. In _____, Jonas Salk and Thomas Francis Jr. invented the first influenza vaccine.⁵
3. Between 2004-2018, more than _____ children died due to flu in the United States. Historically, ____ % to ____ % of flu deaths are in unvaccinated children, many of whom were otherwise healthy.^{6,7,8,9,10}
4. The flu vaccine has been available in the United States for more than _____ years.¹¹
5. While vaccine effectiveness can vary, recent studies show that when the flu vaccine is well-matched to circulating strains, it can reduce the risk of flu illness by approximately ____ % to ____ % among the overall population.¹²

Answers can be found on page 15.

Here are some important messages to use when having these conversations

- Flu is a highly contagious viral infection of the respiratory tract (nose, throat and lungs) that can also affect many other organs in the body and cause serious complications or even death.¹⁴
- Children have the highest rate of infection from flu and young children are also at higher risk of developing serious complications from the flu, including hospitalization and even death.¹⁵ Children are often the “spreaders” of germs in their communities, too.
- Flu vaccines, which have been available in the United States for more than 50 years, are safe and the best option to help protect children against this potentially deadly disease.¹¹
- In addition to the serious health risks, catching the flu may mean missed school days for children, time off from work for parents/caregivers, and in some cases hospitalization, significant medical expenses and even death.¹
- Unvaccinated people can also spread the flu virus to others, which is particularly dangerous for pregnant women, children, the elderly or people with compromised immune systems.¹⁴



For more information about the flu and the importance of annual vaccination from a family perspective, please watch Families Fighting Flu's “Play It Safe” public service announcement.

www.familiesfightingflu.org/multimedia/

Do You Know: How to Respond to Tough Questions You May Receive About the Flu & the Flu Vaccine?

Parent:

Isn't the flu just a bad cold? My child is healthy, and the flu doesn't seem serious enough to require a vaccination.

Healthcare Professional:

The flu is a serious and a highly contagious viral infection, which can be more serious than the common cold for children.¹⁴ In fact, children have the highest rate of infection from flu.¹⁵ And, in the United States, the CDC estimates that since 2010, hospitalizations due to flu ranged from approximately 140,000 to 710,000 cases per year¹⁶, with hospitalizations of children five years of age and younger ranging from 7,000 to 26,000 cases per year.¹ Sadly, children, even otherwise healthy children, can die from the flu.²

In fact, a recent study published in a well-respected medical journal was the first of its kind to show that flu vaccination significantly reduced a child's risk of dying from flu and its complications.²

It's important to remember that the flu vaccination is the best way to help protect yourself and your family from this serious and potentially deadly disease.¹

Parent:

My child got vaccinated last year. Why do we need to do it again?

Healthcare Professional:

Annual flu vaccination is critical because flu strains can change from year to year, and the flu vaccine is updated annually to help protect against the anticipated circulating strains.³ Even in a mild flu season, it's important to get your flu vaccination. Furthermore, the body's immunity to flu declines over time making annual flu vaccination important to maintain immunity.³

Flu Fact:

CDC estimates that by increasing vaccination rates by just 5 percent, 500,000 flu illnesses, 230,000 flu-associated medical visits, and 6,000 flu-associated hospitalizations could be prevented.¹¹



It is also important to ensure that your office staff has received a flu vaccination.

Lead by example!

Parent:

I'm concerned about the flu vaccine. Is it safe?

Healthcare Professional:

Yes, according to the CDC, the flu vaccine is safe and also the best preventative measure we have to help protect against this serious and potentially deadly disease. In fact, flu vaccines have been available in the United States for more than 50 years, and there is extensive research proving their safety. In addition, the CDC, along with the U.S. Food and Drug Administration (FDA), regularly monitors the safety of vaccines that are used in the United States. Vaccines go through extensive research before they are deemed safe by the FDA and made available to the general public.¹⁷

Additionally, the flu vaccine cannot cause the flu because it contains an inactivated or attenuated virus, or no flu virus at all.¹⁸ Common side effects that can be associated with flu vaccination include soreness, redness, and/or swelling at the injection site, fever, headache and/or muscle aches.¹⁸

Parent:

My child is afraid of needles and would prefer the nasal mist option. Can my child have that instead?

Healthcare Professional:

The live attenuated influenza vaccine (LAIV), also known as the nasal spray or mist, is one of the approved flu vaccines for this flu season. The CDC Advisory Committee on Immunization Practices (ACIP) does not make any preferential recommendation for one flu vaccine product over another. The flu is a serious and highly contagious viral infection. Getting a flu vaccination is an important decision you should make for the health of your child/children, your family, and your community.³

Parent:

I heard that the flu vaccine isn't 100 percent effective. So why should my child get it if it doesn't guarantee protection from the flu?

Healthcare Professional:

Although the flu vaccine is not 100 percent effective, it's the best preventative measure we have to help protect ourselves and our families against this serious and potentially deadly disease.³ Based on the recommendation from the CDC, everyone 6 months of age and older should receive an annual flu vaccination (unless instructed otherwise by a healthcare professional) to not only help protect themselves, but also to help reduce the spread of flu in the community.¹ Did you know that by getting a flu vaccination, you are actually helping to lower the risk of flu spreading throughout our communities?³

The flu vaccine has been found to prevent death in otherwise healthy children by as much as 65 percent.² Also, the flu vaccine has been shown to reduce the risk of flu illness by up to 60 percent.^{2,12}

Do You Know the Flu: Resources for Parents

These educational resources (on pages 12-13) share important information for parents so they can get to know the flu and the importance of the flu vaccine in order to make the decision to vaccinate their child/children.

The infographics are sized to 8 ½" x 11" for easy printing/posting in offices, such as exam rooms or waiting rooms.

Use them to start a conversation with parents about flu vaccination.

DO YOU *KNOW* the Flu?

Here are three steps to take to help keep your family healthy this flu season . . .

The Flu is NO Fun

Know the Facts



Flu is a highly-contagious disease that easily spreads via droplets created when someone coughs, sneezes, or talks.



Children have the highest rate of infection due to flu.



In the U.S., more than 1,600 children have died due to the flu between 2004-2018.¹ Historically, 80-95% of flu deaths are in unvaccinated children.^{2,3}

Have a Flu Vaccination Game Plan



Annual flu vaccination for everyone 6 months of age and older is the best way to protect against the flu.



Make getting your annual flu vaccination a FUN, family activity. HERE'S HOW:

- #1** Get your family vaccinated...TOGETHER.
- #2** Afterwards, enjoy a family activity, such as going to the movies or to your favorite restaurant.

Practice Healthy Habits, too



In addition to an annual flu vaccination, it's also important to remember to:

- Wash hands often
- Stay home if you don't feel well
- Avoid touching your eyes, nose, or mouth – germs spread this way
- Cough into elbows, not hands to avoid sharing germs
- Clean and disinfect surfaces at home, work, or school, especially when someone is sick



Getting your annual flu vaccination and practicing healthy habits protects you AND everyone around you, too!

Remember: It's Not 'JUST' the Flu – It's a Serious Disease!
For more information visit: www.familiesfightingflu.org
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1. Pediatric Influenza Associated Deaths: Monthly, 2004-2018. Available at <https://gis.cdc.gov/D3NNDPP/PIDmaps/PIDmaps/flu/deaths.html>. Accessed August 24, 2018.
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Get to Know the Flu Vaccine: You'll Be Glad You Did!

What is flu? Influenza, or the flu, is a highly contagious viral infection that spreads via droplets made when someone coughs, talks or sneezes.^{1,2} The flu vaccine is the best preventative measure available to help protect against the flu – a serious and potentially deadly disease.³

The Top 10 Flu Vaccine Facts YOU Need to Know

- 1 Who needs a flu vaccine?**
The Centers for Disease Control and Prevention (CDC) recommends annual flu vaccination for everyone 6 months of age and older, with rare exception.⁴
- 2 Why do you need a flu vaccination every year?**
Flu strains can change from year to year, and the flu vaccine is updated annually to help protect against the anticipated circulating strains.⁵
- 3 Is the flu vaccine safe?**
Yes! The flu vaccine has been available in the United States for more than 50 years. The CDC and U.S. Food and Drug Administration (FDA) routinely monitor the safety of all vaccines.⁶
- 4 Can the flu vaccine cause the flu?**
No! The vaccine contains an inactivated or attenuated virus, or no flu virus at all, so it's impossible to get the flu from a vaccination.⁶
- 5 Is the flu vaccine effective?**
Yes, the flu vaccine was found to prevent death in otherwise healthy children by as much as 65 percent. Also, it can reduce the risk of flu illness for the general population by up to 60 percent when the vaccine is well-matched to circulating strains.^{6,7}
- 6 How does the flu vaccine work?**
The vaccine causes your body to create antibodies that fight the flu virus. It takes approximately two weeks after vaccination for your body to build up protection against the flu, so get vaccinated as early as possible (preferably by October).^{8,9}
- 7 How many doses of the vaccine does my child need?**
CDC recommends that children 6 months through 8 years who are receiving a flu vaccine for the first time get two doses, spaced at least 28 days apart. Children who previously received a flu vaccine only require one dose.⁴
- 8 What are common side effects of the flu vaccine?**
Common side effects can include soreness, redness, and/or swelling at the injection site, fever, headache, and/or muscle aches.⁶
- 9 Is it worse to get the flu or a flu vaccination?**
Getting a flu vaccination takes minutes, but the flu can make you sick for up to two weeks and can be serious, causing hospitalization and even death.⁶
- 10 Besides vaccination, what else can I do to keep my family healthy during flu season?**
Practice healthy habits such as washing your hands often; doing the elbow cough; avoid touching your eyes, nose, or mouth to lessen the spread of germs; and stay home if you don't feel well.

Remember: It's Not 'Just' the Flu – It's a Serious Disease!
For more information, visit www.familiesfightingflu.org

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In the U.S., more than **1,650 children have died** due to the flu between 2004-2018.¹ Historically, 80-85% of flu deaths are in unvaccinated children.^{2,3}



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Make getting your annual flu vaccination a **FUN, family activity**.

HERE'S HOW:

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#2 Afterwards, enjoy a family activity, such as going to the movies or to your favorite restaurant.



Practice Healthy Habits, too



In addition to an annual flu vaccination, it's also important to remember to:

- Wash hands often
- Stay home if you don't feel well
- Avoid touching your eyes, nose, or mouth - germs spread this way
- Cough into elbows, not hands to avoid sharing germs
- Clean and disinfect surfaces at home, work, or school, especially when someone is sick



Getting your annual flu vaccination and practicing healthy habits protects you **AND** everyone around you, too!

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1. FluView. Influenza Associated Pediatric Mortality 2004-2018. Available at <https://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html>. Accessed August 24, 2018.
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3. Centers for Disease Control and Prevention. CDC Reported Flu Deaths in Children Exceeds Seasonal High. Available at <https://www.cdc.gov/flu/spotlights/reported-flu-children-deaths.htm>. Accessed August 24, 2018.



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The Top 10 Flu Vaccine Facts **YOU** Need to Know

- 1 Who needs a flu vaccine?**
The Centers for Disease Control and Prevention (CDC) recommends annual flu vaccination for everyone 6 months of age and older, with rare exception.⁴
- 2 Why do you need a flu vaccination every year?**
Flu strains can change from year to year, and the flu vaccine is updated annually to help protect against the anticipated circulating strains.⁵
- 3 Is the flu vaccine safe?**
Yes! The flu vaccine has been available in the United States for more than 50 years. The CDC and U.S. Food and Drug Administration (FDA) routinely monitor the safety of all vaccines.³
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**Remember:
It's Not 'Just' the Flu –
It's a Serious Disease!**

For more information, visit
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About Families Fighting Flu

Families Fighting Flu is a national, nonprofit, 501(c)(3) volunteer-based advocacy organization dedicated to protecting children and their families against influenza. Our organization includes families whose children have suffered serious medical complications or died from influenza, as well as other advocates and healthcare practitioners committed to flu prevention. In honor of our children, we work to increase awareness about the seriousness of the disease and to reduce the number of hospitalizations and deaths caused by the flu each year by increasing vaccination rates.

For more information, please visit: www.familiesfightingflu.org.

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About the National Association of Pediatric Nurse Practitioners

The National Association of Pediatric Nurse Practitioners (NAPNAP) is the nation's only professional association for pediatric nurse practitioners (PNPs) and their fellow pediatric-focused advanced practice registered nurses (APRNs) dedicated to improving the quality of health care for infants, children, adolescents and young adults. Representing more than 8,500 healthcare practitioners with 19 special interest groups and 50 chapters, NAPNAP has been advocating for children's health since 1973 and was the first APRN society in the United States.

Visit www.NAPNAP.org for provider and family resources.

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About HealthyWomen

For nearly 30 years, HealthyWomen has inspired and empowered millions of women to take a proactive role in their health. A progressive and unique women's health not-for-profit, HealthyWomen combines a 24/7 online health media platform with award-winning education and advocacy campaigns. HealthyWomen's web destination engages with readers and health care providers alike and provides valuable health information that educates women and guides them through the various ages and stages of life.

For more information on HealthyWomen, visit www.healthywomen.org.

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How Well DO YOU KNOW THE FLU? **Answers from page 7**

1. The Spanish Flu of 1918 killed an estimated **50** million people and is ranked as one of the deadliest outbreaks in history.⁴
2. In **1938**, Jonas Salk and Thomas Francis Jr. invented the first influenza vaccine.⁵
3. Between 2004-2018, more than **1,650** children died due to flu in the United States. Historically, **80% to 85%** of flu deaths are in unvaccinated children, many of whom were otherwise healthy.^{6,7,8,9,10}
4. The flu vaccine has been available in the United States for more than **50** years.¹¹
5. While vaccine effectiveness can vary, recent studies show that when the flu vaccine is well-matched to circulating strains, it can reduce the risk of flu illness by approximately **40% to 60%** among the overall population.¹²

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DO YOU KNOW THE FLU?



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