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What you need to know about the flu

The flu is an illness caused by a virus. Like a cold, it attacks the nose, throat, and lungs. The flu can sometimes lead to other problems like pneumonia, ear/sinus problems, dehydration, and worsening of asthma. For most of us, the flu will go away in 1-2 weeks.

How can I catch the flu?

- The flu is easily passed from person to person via direct contact or via airborne pathogens (coughing and sneezing).
- A person can also get the flu by touching something with the flu virus on it and then touching their mouth or nose.

Who is most at risk for getting the flu?

Everyone is at risk for getting the flu, but for some people the flu can cause serious illness. Those most at risk include:

- All children aged 6 months to 5 years
- All persons aged older than or equal to 50 years
- Children and adolescents (aged 6 months to 18 years) who are receiving long-term aspirin therapy
- Women who will be pregnant during the influenza season
- Adults and children who have lung (including asthma), heart (except high blood pressure), kidney, liver, brain/nerve, blood, or metabolic disorders (including diabetes mellitus)
- Adults and children who have a weak immune system either due to illness or medication
- Residents of nursing homes and other long-term-care facilities
- Health care personnel
- People exposed to at-risk people



“Influenza (flu) usually comes on suddenly. In many cases you can pinpoint the hour when symptoms start.”



See page 4 for children under 9 years of age to see how many doses are needed this season.

Who should not receive the flu vaccine?

It is best for everyone, including breastfeeding mothers, to receive the flu vaccine (save those who have contraindications to receiving it, as listed below). In the event of a known flu vaccine shortage, we may be mandated by the CDC to follow a prioritization plan.

People who **SHOULD NOT** get the flu vaccine (see CDC website for VIS):

- Children less than 6 months of age
- Anyone with moderate to severe febrile illness
- Anyone with an active neurological disorder
- Anyone with a history of Guillain-Barré Syndrome

Please let us know if you have a bleeding disorder or are receiving anticoagulant therapy. **We recommend all family members 65 years and older see their doctor for the high dose flu vaccine.**

People who **SHOULD NOT** get the nasal spray flu vaccine (see CDC website for VIS):

- Anyone with a history of severe allergic reaction, including anaphylaxis, to any components of the flu vaccine or eggs
- Anyone aged <2 years or those aged ≥ 50 years
- Adults and children who have lung (including asthma), heart (except high blood pressure), kidney, liver, brain/nerve, blood, or metabolic disorders (including diabetes mellitus)
- Adults and children who have a weak immune system either due to illness or medication (including immunosuppression caused by medications or by HIV) and/or anyone who lives with someone with a weak immune system
- Anyone who has taken influenza antiviral medication in the last 3 weeks
- Anyone who does not have a spleen, or has a non-functioning spleen
- Anyone who has a cochlear implant
- Anyone who has a cerebrospinal fluid leak
- Anyone with a history of Guillain-Barré syndrome
- Children 5 years or older with asthma
- Children aged 2-4 years whose parents or caregivers report that a healthcare provider has told them during the preceding 12 months that their child has wheezing or asthma, or has taken the following medication: Albuterol, Xopenex, Advair, Flovent, Symbicort, Pulmicort
- Children and adolescents (aged 6 to 18 years) who are receiving long-term aspirin therapy
- Pregnant women

What are the symptoms of the flu?

The most common signs of the flu include:

- Fever
- Headache and muscle ache
- Fatigue
- Cough
- Sore throat
- Runny or stuffy nose
- Vomiting or diarrhea (more common in children)



The flu shot prevents serious complications from the flu in 70% to 90% of young, healthy adults.

What's available?

Flu viruses are constantly changing. The composition of U.S. flu vaccines is reviewed annually by the U.S. Food and Drug Administration Vaccines and Related Biological Products Advisory Committee and updated as needed to best match the flu viruses research indicates will be most common during the upcoming season. The 2023-2024 season U.S. flu vaccines will contain an updated influenza A(H1N1)pdm09 component:

- A/Victoria/4897/2022 (H1N1)pdm09-like virus for egg-based vaccines and
- A/Wisconsin/67/2022 (H1N1)pdm09-like virus for cell-based or recombinant vaccines.

How well flu vaccine works can depend in part on the match between the vaccine viruses and circulating viruses. Preliminary estimates show that last season, people who were vaccinated against flu were about 40% to 70% less likely to be hospitalized because of flu illness or related complications.

In healthy children 2-8 years of age, the Advisory Committee on Immunization Practices (ACIP) no longer recommends a preference for the intranasal spray flu vaccine over the injectable flu vaccine as new data from more recent seasons have not confirmed superior effectiveness of the intranasal vaccine. Both the intranasal and injectable are equally recommended.

Age	Dose
6 months and older (Injectable)	0.5 ml injection vaccine regardless of age
2 years and older (Intranasal)	Same dosage regardless of age; limited supply this year

Note: Children 6 months to younger than 9 years of age may need to receive the vaccine twice, separated by at least 4 weeks. See page 4 for exact details.

“About 20-50% of the U.S. population gets the flu each season”



It takes about two weeks for the flu vaccine to be effective.

When to get vaccinated?

Yearly flu vaccination should begin in September or as soon as the vaccine is available and continue throughout the influenza season, as late as March or beyond. The timing and duration of influenza seasons vary.

While influenza outbreaks can happen as early as October, most of the time influenza activity peaks in February or later. About 2 weeks after vaccination, antibodies that provide protection against influenza virus infection develop in the body.

One or Two Shots Needed?

If your child is **9 years or older**, regardless of what flu immunizations have been given in the past, they will only need **ONE** immunization this flu season.

If your child is **under 9 years of age**, they may need **TWO** immunizations this year. See the chart below to assist you in knowing how many shots your child will need this flu season.

If your child needs two flu vaccines this year, they should be spaced apart by a minimum of 4 weeks (28 days). There is no deadline by which the 2nd flu vaccine needs to be completed, but once the minimum 4 weeks has passed, the sooner the better as your child will have optimal protection only after the 2nd immunization.

The Saturday flu clinics we are hosting at multiple Blue Fish locations are each spaced two weeks apart. Should your child need two flu vaccines, please plan accordingly. For example, if you attend Saturday flu clinic #1, come back for the second shot at flu clinic #3, 4, 5 or 6 (sooner is ideal). Or if you attend Saturday flu clinic #3, come back for the second shot at flu clinic #5 or 6 (sooner is ideal).



“Seasonal” influenza vaccines are formulated to prevent annual flu.

Check out our website for updates on our flu vaccine availability!
www.bluefishmd.com

	0 flu shots before July 2023	1 flu shot before July 2023	2 flu shots before July 2023
Under 9 years of age	2 flu shots needed	2 flu shots needed	1 flu shot needed
9 years or older	1 flu shot needed	1 flu shot needed	1 flu shot needed

Egg Allergy Protocol (per CDC)

All children with egg allergy of any severity can receive influenza vaccine without any additional precautions beyond those recommended for any vaccine.

Flu and COVID-19 (per CDC)

Can I get the flu shot and COVID vaccine at the same time?

Yes, you can get a COVID-19 vaccine and a flu vaccine at the same time. Even though both vaccines can be given at the same visit, people should follow the recommended schedule for either vaccine: If you haven't gotten your currently recommended doses of COVID-19 vaccine, get a COVID-19 vaccine as soon as you can, and ideally get a flu vaccine by the end of October.

Can I have flu and COVID-19 at the same time?

Yes. It is possible to have flu, as well as other respiratory illnesses, and COVID-19 at the same time. Health experts are still studying how common this can be. Some of the symptoms of flu and COVID-19 are similar, making it hard to tell the difference between them based on symptoms alone. Diagnostic testing can help determine if you are sick with flu or COVID-19.

Will a flu vaccine protect me against COVID-19?

While getting a flu vaccine will not protect against COVID-19, flu vaccination has many other important benefits. Flu vaccines have been shown to reduce the risk of flu illness, hospitalization and death. Getting a flu vaccine this fall will be more important than ever, not only to reduce your risk from flu but also to help conserve potentially scarce health care resources.

Should a flu vaccine be given to someone with suspected or confirmed COVID-19?

No. Vaccination should be deferred (postponed) for people with suspected or confirmed COVID-19, regardless of whether they have symptoms, until they have met the criteria to discontinue their isolation. While mild illness is not a contraindication to flu vaccination, vaccination visits for these people should be postponed to avoid exposing healthcare personnel and other patients to the virus that causes COVID-19. When scheduling or confirming appointments for vaccination, patients should be instructed to notify the provider's office or clinic in advance if they currently have or develop any symptoms of COVID-19. Additionally, a prior infection with suspected or confirmed COVID-19 or flu does not protect someone from future flu infections. The best way to prevent seasonal flu is to get vaccinated every year.

When will the vaccines be available?

During regular office hours (starting in September), the flu vaccine will be available at well visits for **all patients of Blue Fish Pediatrics / family members living in the same household with patients younger than 6 months old**. Flu vaccines will also be administered during sick visits at their doctor's recommendation.

To help accommodate our busy families, we have designated Saturday flu clinics. **Unlike previous years, any patient of Blue Fish, regardless of their home office, can attend any of our Saturday flu clinics.** Any Blue Fish patient or parent is eligible to receive the flu vaccine on these specially designated Saturdays (see below for dates). Also eligible are any family member(s) living in the same household with patients younger than 6 months old. **For those 65yrs and older, Blue Fish does NOT carry the high dose flu vaccine.** On these specially designated Saturdays, please use our bookafy system to schedule ahead for the flu vaccine. The scheduling link will be available on our website, and sent out to the mailing list for newsletter recipients.

- The availability of certain flu products may be limited towards the end of the flu season.
- Please visit our website for the 2023-2024 flu information page (online booking available for flu clinics; link on our flu information page)
- The intradermal flu vaccine will NOT be available at Blue Fish.
- The recombinant flu vaccine will NOT be available at Blue Fish.

2023 Flu Clinic Dates and Locations				Hours
September 9	Cypress and Katy	October 21	Cypress and Katy	8:00 AM to 1:00 PM All Clinics
September 16	Memorial, Woodlands, Sienna	October 28	Memorial	
September 23	Cypress and Katy	November 4	Cypress and Katy	
September 30	Memorial	November 11	Memorial	
October 7	Cypress and Katy	November 18	Cypress and Katy	
October 14	Memorial, Woodlands, Sienna	December 2	Memorial	

Payment

Please read the following carefully. Regrettably, the following explanation is complicated and beyond our control.

All parents (and family members who are not Blue Fish patients) receiving the flu vaccine will pay cash prices. If you would like to receive the flu vaccine via your insurance, please arrange for your flu vaccine through your regular doctor.

Cash paying patients: The cost is **\$40** for injection and **\$40** for nasal vaccine. If VFC eligible and VFC flu vaccine is in stock, then the cost is **\$13.75** for the administration fee.

Medicaid and CHIP: The vaccine is covered by your insurance as long as we have the VFC flu vaccine in stock. If we should run out of VFC stock, you can pay the cash price for the vaccine.

Commercial Insurance: You will need to pay your copay for your insurance. Even if your copay is higher than what we charge our cash paying patients, we are contractually obligated by the insurance carrier to charge you the full copay amount. Insurance companies are firm concerning this matter. We apologize for this inconvenience, but we are contractually obligated to do so. You have the option of receiving the flu vaccine elsewhere such as a grocery store or pharmacy for their cash price (as they are not contracted with your insurance company.)

2023 COVID XBB Booster Update

An updated COVID booster from Pfizer, Moderna, and Novavax is expected to be available **mid-to-late September**. It will be targeted to protect against newer variants which will likely provide better protection from prominent variants now circulating, which are descendants of an omicron subvariant known as XBB1.5.

If you're in a low-risk category for COVID complications and you don't have consistent interaction with high-risk family or friends, waiting for the updated booster is probably the best recommendation. However, it is a highly individualized decision as there is not good data regarding this.

The updated booster expected for the fall season is showing a significant boost in antibodies against many of the currently circulating variants.

There may be specific situations where you may want to play it safe and get the current omicron COVID immunization now, if you have not already. If you think you're going to have considerable exposures, between then and now, it is recommended to be up to date with current COVID vaccines. The best time to get vaccinated is before you get infected. You can always do another COVID booster when the newer version is released.

If your child is 6 months to 4 years, they will need 3 total doses of the COVID vaccine for full protection (#1 now, three weeks later #2, eight weeks later #3). For this age group, in order not to delay protection, we recommend to begin with the current COVID vaccine at this time and switch to the newer booster to complete the series should it become available.

It is safe and effective to receive both the COVID and flu vaccines at the same visit.

Our initial Saturday Flu Clinics will only offer the flu vaccine. However, when the newest COVID booster becomes available we will offer it alongside the flu vaccine at all remaining Saturday Flu Clinics and at all Well Child Checks.

Blue Fish will likely only offer the Pfizer brand COVID booster.

Beyfortus (nirsevimab)

What is Beyfortus (nirsevimab)?

Beyfortus™ (nirsevimab) is a new prescription long-acting monoclonal antibody product used to help prevent a serious lung disease caused by Respiratory Syncytial Virus (RSV). Nirsevimab is not a vaccine.

- Nirsevimab was approved by the **US Food and Drug Administration (FDA)** on July 17, 2023.
- On August 3, 2023, the **Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC)** voted unanimously in favor of recommending use of nirsevimab.
- The **American Academy of Pediatrics** recommends that all infants -- and especially those at high risk -- receive the new preventive antibody, nirsevimab, to protect against severe disease caused by respiratory syncytial virus (RSV), which is common, highly contagious and sometimes deadly.

RSV is one of the most common causes of childhood respiratory illness and results in annual outbreaks of respiratory illnesses in all age groups. An estimated **58,000 to 80,000** children under 5 years of age, most of them infants, are hospitalized each year nationwide due to RSV infection, with some requiring oxygen, intravenous (IV) fluids, or mechanical ventilation (a machine to help with breathing). **Each year, an estimated 100 to 300 children younger than 5 years of age die due to RSV.**

Who should get Beyfortus (nirsevimab)?

Nirsevimab is recommended for:

1. All infants younger than 8 months born during or entering their first RSV season, including those recommended by the American Academy of Pediatrics (AAP) to receive Synagis (palivizumab).
2. Infants and children aged 8 through 19 months who are at increased risk of severe RSV disease (see below) and entering their second RSV season, including those recommended by the AAP to receive Synagis (palivizumab).

Per the FDA label, children who have received nirsevimab should not receive palivizumab for the same RSV season.

Who should not get nirsevimab?

Nirsevimab is contraindicated in individuals with a history of serious hypersensitivity reactions, including anaphylaxis, to nirsevimab-alip or to any of the excipients.

Hypersensitivity including Anaphylaxis:

Serious hypersensitivity reactions, including anaphylaxis, have been observed rarely with other human IgG1 monoclonal antibodies. If signs and symptoms of a clinically significant hypersensitivity reaction or anaphylaxis occur, initiate appropriate medicinal products and/or supportive therapy.

Use in Individuals with Clinically Significant Bleeding Disorders:

As with any other IM injections, Beyfortus should be given with caution to individuals with thrombocytopenia, any coagulation disorder or to individuals on anticoagulation therapy.

Nirsevimab is not recommended if there is a previous history of RSV infection.

Administration:

Prefilled syringe given IM in the thigh.

Reactions:

Most common adverse reactions with nirsevimab were rash (0.9%) and injection site reactions (0.3%).

Beyfortus (nirsevimab) continued

Pricing:

Estimated to be approximately \$495 out of pocket. As soon as nirsevimab is available, Blue Fish hopes to have it in stock. It will likely not be covered by insurances initially, but we will offer it for those families who qualify medically. Parents can opt to pay for the treatment up front. (Insurances will be billed and reimbursement will be given should your insurance later pay.)

For qualifying families, Beyfortus should be added to the VFC program sometime this fall, hopefully by October.

Timing of nirsevimab:

On the basis of pre-pandemic RSV infection patterns, nirsevimab may be administered in most of the continental United States from **October through the end of March**.

Children 8 through 19 months of age who are recommended to receive nirsevimab when entering their SECOND RSV season because of increased risk of severe disease:

1. Children with chronic lung disease of prematurity who required medical support (chronic corticosteroid therapy, diuretic therapy, or supplemental oxygen) any time during the 6-month period before the start of the second RSV season
2. Children who are severely immunocompromised
3. Children with cystic fibrosis who have manifestations of severe lung disease (previous hospitalization for pulmonary exacerbation in the first year of life or abnormalities on chest imaging that persist when stable) or have weight-for-length that is <10th percentile

Coadministration with routine childhood vaccines:

In accordance with the CDC's general best practices for immunizations, simultaneous administration of nirsevimab with age-appropriate vaccines is recommended. In clinical trials, when nirsevimab was administered concomitantly with routine childhood vaccines, the safety and reactogenicity profile of the concomitantly administered regimen was similar to the childhood vaccines administered alone. When concomitantly administered, nirsevimab is not expected to interfere with the immune response to other vaccines.

When will Beyfortus (nirsevimab) become available at Blue Fish?

Blue Fish will send out further communication if/when we are able to stock Beyfortus.

FALL 2023 VACCINES

What are the options?

Who is eligible?

How well do they work?

When should I get it?

INFLUENZA



A shot that targets 4 strains of seasonal flu

6 months and older

Typically reduces the risk of going to the doctor by 40-60%

October is ideal, as vaccine protection wanes over a season

COVID-19



Updated vaccine formula targeting XBB – an Omicron subvariant

Options: Moderna and Pfizer (mRNA) and Novavax (protein)

TBD. CDC will decide in mid-to-late September

Last year, the fall COVID-19 vaccine provided 40-60% additional effectiveness against severe disease

For protection against **severe disease**, get it anytime
Protection against **infection**: It's best to get it right before a wave, which can be challenging to time

RSV (OLDER ADULTS)



2 options: GSK and Pfizer. They are slightly different in design, but only at a microscopic level

60 years and older

82-86% efficacy against severe disease

Protection is durable. Get when it's available; no need to juggle timing

RSV (PREGNANCY)



Pfizer is actively seeking approval

Pregnant people (then protection will pass to baby for protection in first 6 months of life).

82% efficacy in preventing hospitalization in first 3 months of life. 69% efficacy after 6 months

It's not available yet but once approved, get at 24 to 36 weeks of pregnancy

RSV ANTIBODY



A new monoclonal antibody by AstraZeneca. This is not a vaccine (doesn't teach the body to make antibodies) but rather a proactive medication (provides antibodies).

All infants <8 months. High-risk infants 8-19 months

Reduces risk of hospitalization and healthcare visits by ~80%

Will be available soon.

Protection lasts 4-6 months

By: Katelyn Jetelina, MPH PHD and Caitlin Rivers, MPH PHD. For more information go to Your Local Epidemiologist

Blue Fish will NOT be offering the RSV vaccine for adults and pregnancy but we wanted to inform our families what is soon to be available for educational purposes.