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 his 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
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)

Who should 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.

Those who should not receive the injectable flu vaccine:
- Children less than 6 months of age
- Anyone with moderate to severe febrile illness
- All children with egg allergy of any severity can receive influenza vaccine without any additional precautions beyond those recommended for any vaccine
- 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

Those who should not receive the intranasal flu vaccine:
- Anyone with a history of a 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)
- Children aged 2 - 4 years whose parents or caregivers report that a health-care provider has told them during the preceding 12 months that their child had wheezing or asthma, or has taken the following medication (i.e. Albuterol, Xopenex, Advair, Flovent, Symbicort, Pulmicort)
- Children and adolescents (aged 6 months--18 years) who are receiving long-term aspirin therapy
- Pregnant women
- Anyone with a history of Guillain-Barré Syndrome
- Anyone who is or is living with someone who has a weak immune system either due to illness or medication

“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.
Intranasal flu vaccine not available this year

Although the intranasal flu vaccine is an acceptable alternative to the flu shot for the 2019-2020 flu season, it was produced in such a limited quantity this year that there will be very little available in the United States this flu season.

What’s available?

Flu viruses are always changing. Each year, experts study thousands of flu virus samples from around the world to figure out which viruses are making people sick and how these viruses are changing. With this information, they forecast which viruses are most likely to make the most people sick during the next flu season. These strains are then used to make the flu vaccine for the next flu season.

It is recommended that quadrivalent vaccines for use in the 2019-2020 influenza season (northern hemisphere winter) contain the following:

- A/Brisbane/02/2018 (H1N1)pdm09-like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus updated
- B/Colorado/06/2017-like (Victoria lineage) virus
- Quadrivalent: the three recommended viruses above, plus B/Phuket/3073/2013-like (Yamagata lineage) virus

<table>
<thead>
<tr>
<th>Age</th>
<th>Dose</th>
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<tr>
<td>6 months and older (Injectable)</td>
<td>0.5 ml injection vaccine</td>
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<tr>
<td>2 years to 49 years (Intranasal)</td>
<td>Same dosage regardless of age; however not available due to limited production</td>
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The flu vaccine cannot be given to children under 6 months of age. Therefore, we recommend vaccinating all family members who live with the infant to create "herd immunity."

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 of this packet for exact details.

Blue Fish will only be using quadrivalent vaccines for the 2019-2020 season. These immunizations protect against four flu strains.
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.

However, 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 2 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.

<table>
<thead>
<tr>
<th></th>
<th>0 flu shots before July 2019</th>
<th>1 flu shot before July of 2019</th>
<th>2 flu shots before July 2019</th>
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</thead>
<tbody>
<tr>
<td><strong>Under 9 years of age</strong></td>
<td>2 flu shots needed</td>
<td>2 flu shots needed</td>
<td>1 flu shot needed</td>
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<tr>
<td><strong>9 years or older</strong></td>
<td>1 flu shot needed</td>
<td>1 flu shot needed</td>
<td>1 flu shot needed</td>
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</tbody>
</table>

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.

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

Check out our website for updates on our flu vaccine availability!
www.bluefishmd.com
When will the vaccines be available?

During regular office hours (starting in late September), the flu vaccine will only 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.

The flu vaccine will be administered at all well child visits until supplies are exhausted (no additional appointment or phone call is required).

- The availability of certain flu products may be limited towards the end of the flu season. Check availability of flu products on our website: bluefishmd.com/services/flu-season/
- The intradermal flu vaccine will NOT be available at Blue Fish.
- The recombinant flu vaccine will NOT be available at Blue Fish.

The flu vaccine will be available starting in late September during regular clinic hours.

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 $35 for injection and $35 for nasal vaccine. If VFC eligible and VFC flu vaccine is in stock, then the cost is $14.85 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.)