FAMILIES FIGHTING FLU

A Father's Story

Jeb Teichman, MD FAAP
BOD Families Fighting Flu

December 5, 2024

Disclosures

- I am a paid advisor for Sanofi Vaccines for their Meningococcal Vaccine
- No other planners or presenter have disclosed any relevant financial relationships with any commercial entities whose products, research or services may be discussed in this activity.
- No commercial funding has been accepted for this activity.

Agenda

- A Father's story
- 2023 - 2024 Flu season
- Avian Influenza H5N1
- Influenza Vaccine
- Myths and Misconceptions
- Why do we need vaccines
- Families Fighting Flu, who we are and what we do
- The Role Of The Healthcare Professional
- Motivational Interviewing for Vaccines
- Q&A

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A Father's Story

Brent Teichman
1990-2019

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Brent's Story

- Brent was a healthy 29 years old
- He had been sick for 5 days before notifying family, too late to start antivirals
- He was referred to urgent care on day 7 for difficulty breathing
- He died in his sleep 4 hours after returning from urgent care

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Influenza Doesn’t Discriminate

- Brent was not vaccinated
- Getting vaccinated had been on Brent’s to-do list, but life got busy

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Brent's Vital Signs

Temp: 37.9
Pulse: 157
Resp: 28
Sat: 85%

Labs:
WBC 14,000 Gran 87%

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SIRS criteria

- Body temperature over 38 or under 36 degrees Celsius
- Heart rate greater than 90 bpm
- Respiratory rate greater than 20 breaths per minute
- Partial pressure of CO_2 less than 32 mmHg

2023-2024 INFLUENZA SEASON

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FLU SEASON 2023-2024

CDC estimates* that, from **October 1, 2023** through **June 15, 2024**, there have been:

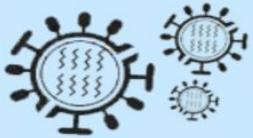
35 – 65 million
flu **illnesses**

16 – 30 million
flu **medical visits**

206
Pediatric Flu Deaths

390,000 – 830,000
flu **hospitalizations**

25,000 – 72,000
flu **deaths**



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Pediatric Deaths 2023-2024 Season

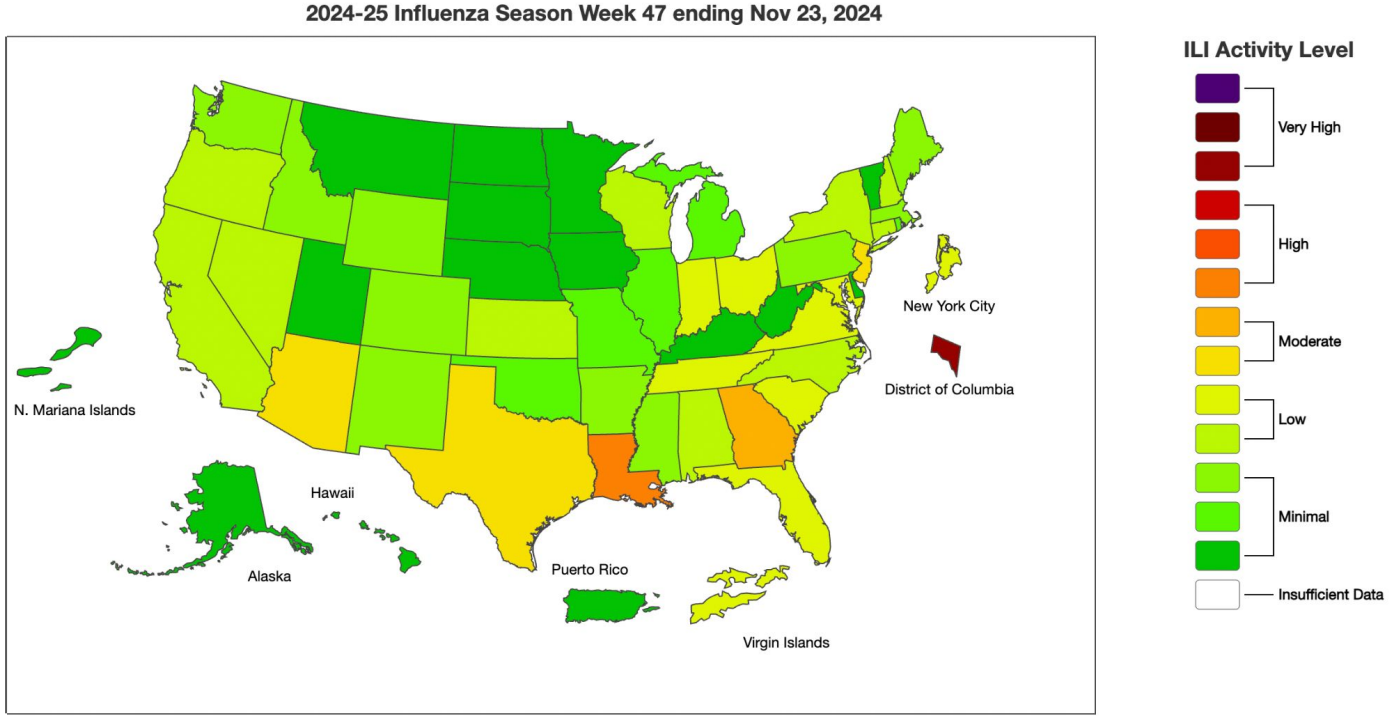
- Among the **162 children eligible** for vaccination **134 (83%)** were not fully vaccinated.

- Of the **194** of the deaths with known medical information **95 (49%)** had at least one pre-existing high risk condition.

Reference from CDC

Influenza Surveillance

2024-2025 Flu Season



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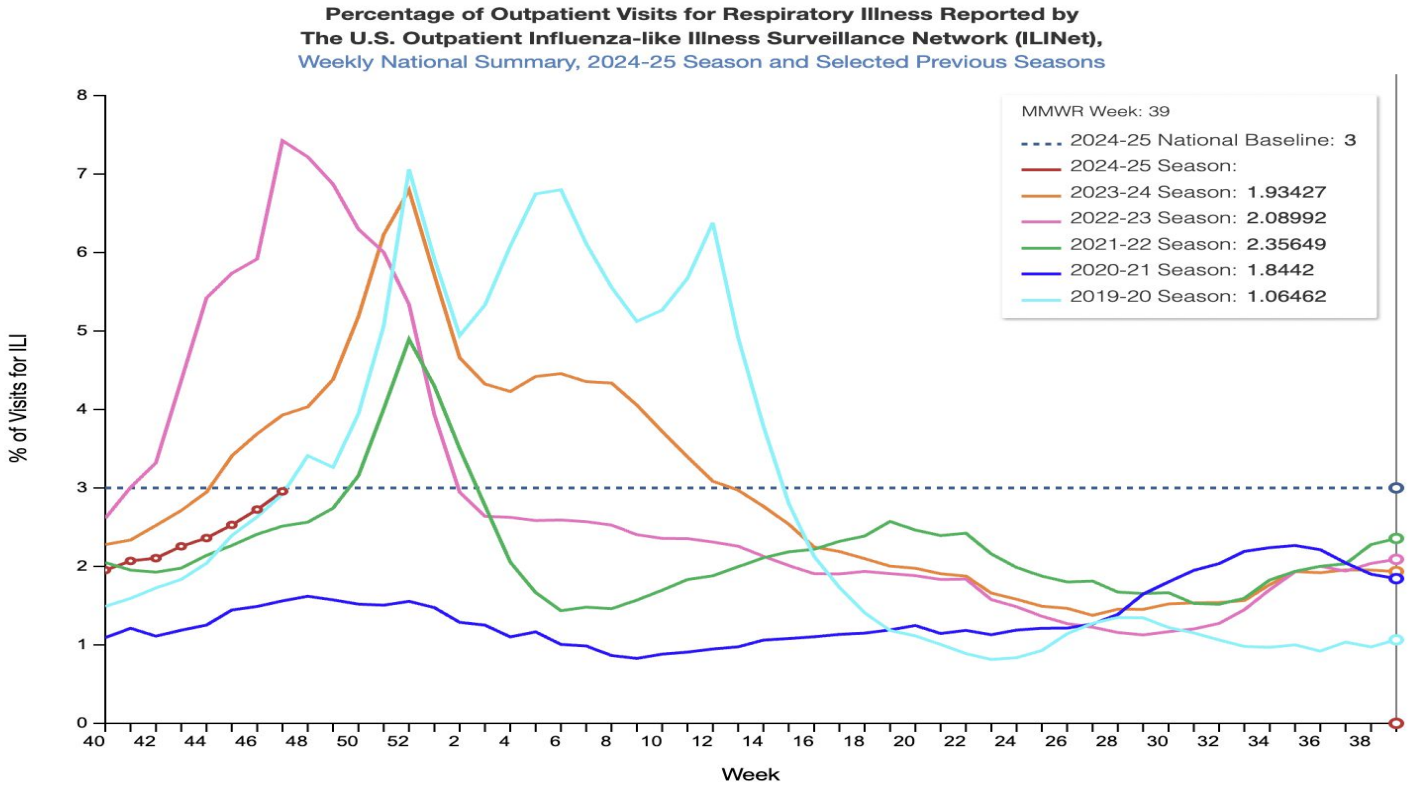
Surveillance Map History

It’s Not Just The Flu



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Massachusetts Influenza Statistics

2023-2024 Season

(as of, June 23, 2024)

- 57,054 lab confirmed cases
- 248 adult deaths
- 3 pediatric deaths

https://www.mass.gov/info-details/influenza-reporting

Massachusetts Influenza Statistics

2024-2025 Season

(as of November 27, 2024)

- 1,444 lab confirmed cases
- 9 adult deaths
- 0 pediatric deaths

https://www.mass.gov/info-details/influenza-reporting

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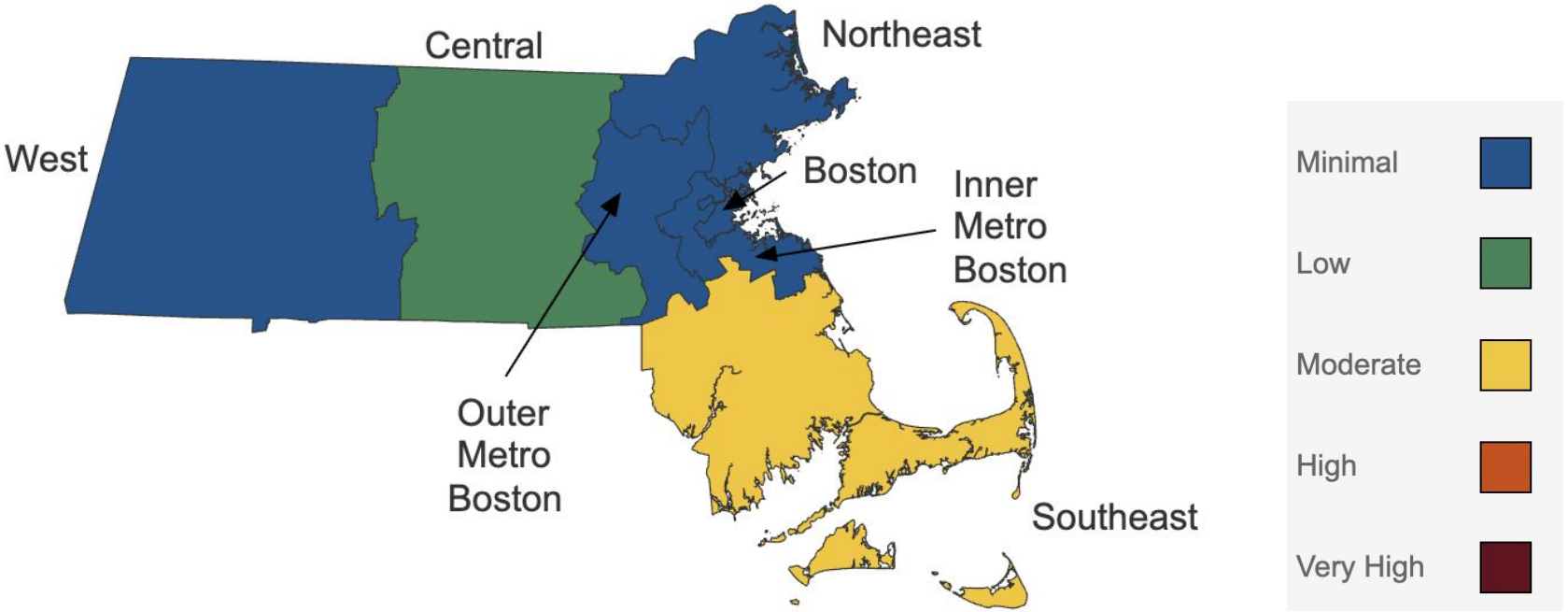
Massachusetts Influenza Statistics

Activity as of November 17, 2024



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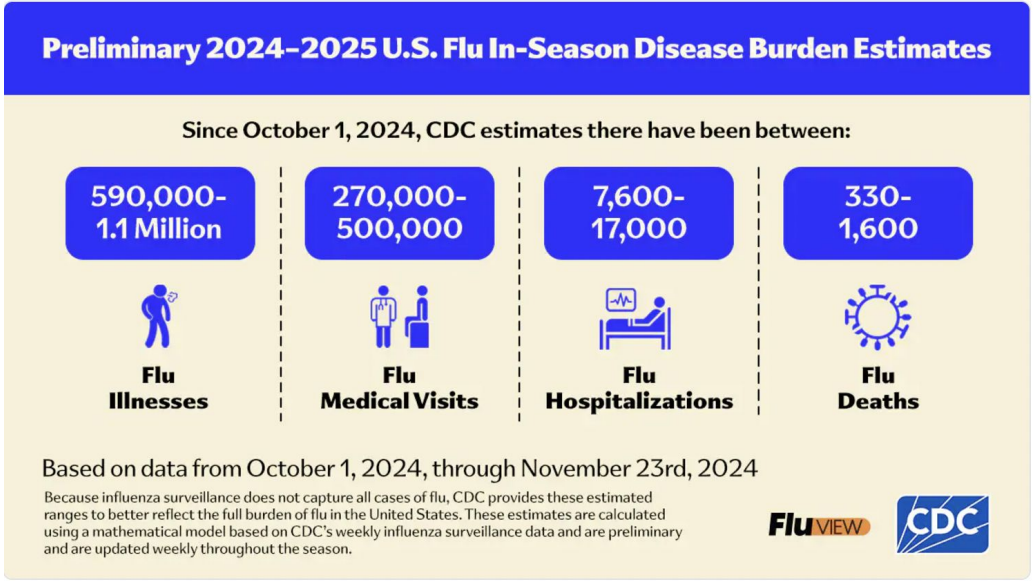
https://www.mass.gov/info-details/influenza-reporting

National Influenza Statistics

2024-2025 Season

(as of, December 2, 2024)

- **2** pediatric deaths



National Influenza Current Activity

(as of November 23, 2024)

Circulating strains

- **A(H1N1) pdm09, A(H3N2), B/Victoria**
- **Matches vaccine strains**
- **2 pediatric deaths**

Influenza A Viruses

- A (H1N1)pdm09: 97 A(H1N1)pdm09 viruses were antigenically characterized by HI, and 94 (96.9%) were well-recognized (reacting at titers that were within 4-fold of the homologous virus titer) by ferret antisera to cell-grown A/Wisconsin/67/2022-like reference viruses representing the A(H1N1)pdm09 component for the cell- and recombinant-based influenza vaccines.
- A (H3N2): 219 A(H3N2) viruses were antigenically characterized by HI or HINT, and 156 (71.2%) were well-recognized (reacting at titers that were within 4-fold of the homologous virus titer in HI or reacting at titers that were less than or equal to 8-fold of the homologous virus in HINT) by ferret antisera to cell-grown A/Massachusetts/18/2022-like reference viruses representing the A(H3N2) component for the cell- and recombinant-based influenza vaccines

Influenza B Viruses

- B/Victoria: 28 influenza B/Victoria-lineage virus were antigenically characterized by HI, and all were well-recognized (reacting at titers that were within 4-fold of the homologous virus titer) by ferret antisera to cell-grown B/Austria/1359417/2021-like reference viruses representing the B/Victoria component for the cell- and recombinant-based influenza vaccines.

AVIAN INFLUENZA THE NEXT PANDEMIC?

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Avian Influenza A H5N1 the next pandemic?

- Avian influenza viruses are thought to have been the precursors to the pandemics that occurred in 1918 and 1957
- Although H5N1 was first identified in birds in 1959 it did not become a concern until 1997 when there was an outbreak in Hong Kong associated with poultry, infecting 18 humans killing 6 of them
- Human cases occurred throughout Asia where people had close contact with infected animals and caused hundreds of deaths worldwide.
- There were no reported cases of human to human transmission during this outbreak.
- Since the 1997 outbreak H5N1 spread in bird populations from Asia to Europe and Africa, and to the Americas in 2021 and has killed not just millions of wild and domestic birds but also cats, dogs, skunks, foxes, a polar bear and wiped out mink farms.

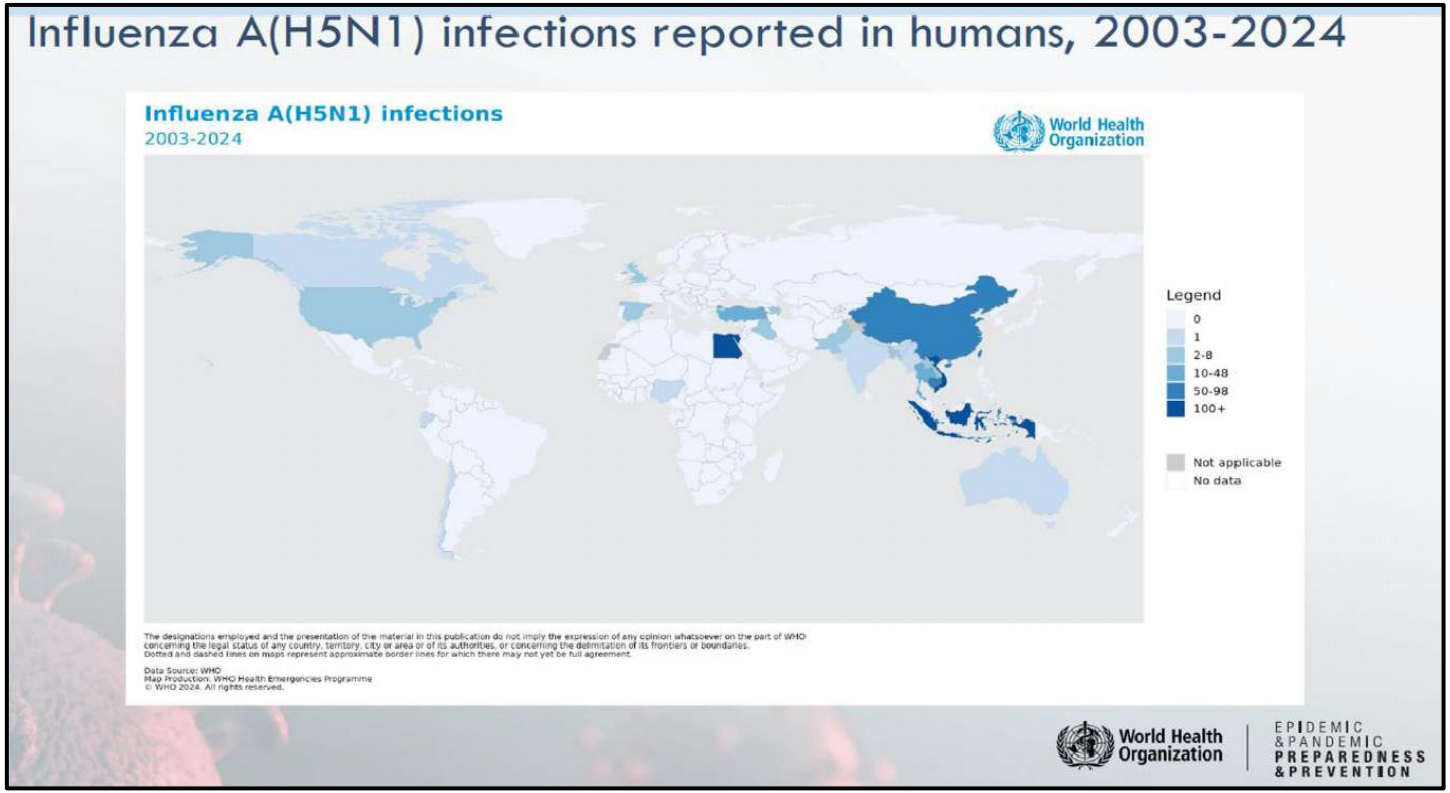
It’s Not Just The Flu

Divergent Pathogenesis and Transmission of Highly Pathogenic Avian Influenza A(H5N1) in Swine

Abstract

Highly pathogenic avian influenza (HPAI) viruses have potential to cross species barriers and cause pandemics. Since 2022, HPAI A(H5N1) belonging to the goose/Guangdong 2.3.4.4b hemagglutinin phylogenetic clade have infected poultry, wild birds, and mammals across North America. Continued circulation in birds and infection of multiple mammalian species with strains possessing adaptation mutations increase the risk for infection and subsequent reassortment with influenza A viruses endemic in swine. We assessed the susceptibility of swine to avian and mammalian HPAI H5N1 clade 2.3.4.4b strains using a pathogenesis and transmission model. All strains replicated in the lung of pigs and caused lesions consistent with influenza A infection. However, viral replication in the nasal cavity and transmission was only observed with mammalian isolates. Mammalian adaptation and reassortment may increase the risk for incursion and transmission of HPAI viruses in feral, backyard, or commercial swine.

Avian Flu The Next Pandemic?



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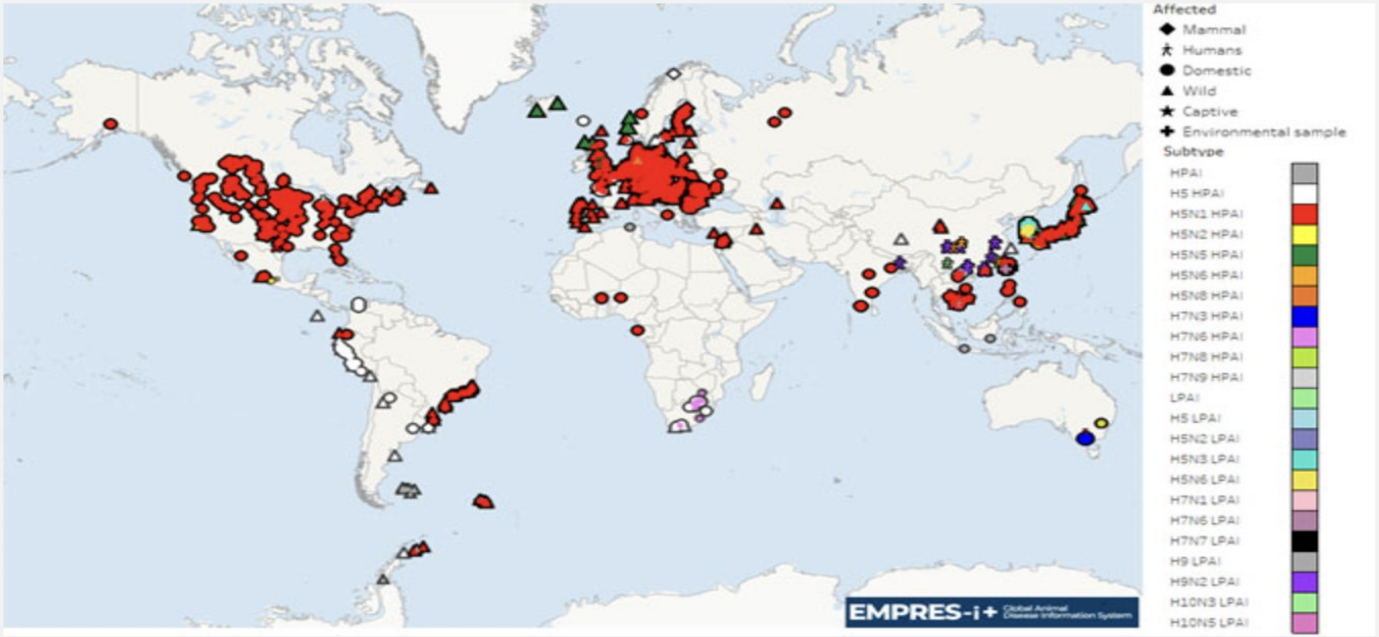
Avian Flu The Next Pandemic?

Map 1. *Global distribution of AIV with zoonotic potential* observed since 1 October 2023 (i.e. current wave)*



Note: Symbols may overlap for events in similar geographic locations.

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https://www.fao.org/animal-health/situation-updates/global-aiv-with-zoonotic-potential/en

Avian Flu The Next Pandemic?

Since 2022 H5N1 caused
50,000 deaths in marine mammals in South America

Dead elephant seals line a beach in Argentina in fall 2023. Avian influenza has caused the catastrophic die-off of thousands of elephant seals in Argentina, raising concerns for wildlife and cross-species transmission. (Ralph Vanstreels/UC Davis)

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By —
Mike Stobbe,
Associated

Avian Flu The Next Pandemic?

In the US

Detections in Animals

- 10,619 wild birds detected as of 11/26/2024 | Full Report
- 51 jurisdictions with bird flu in wild birds
- 111,412,626 poultry affected as of 12/2/2024 | Full Report
- 49 states with outbreaks in poultry
- 689 dairy herds affected as of 12/2/2024 | Full Report

On Wednesday, October 30, 2024, USDA reported an **avian influenza A(H5N1) virus infection in a pig on a backyard farm in Oregon**. This is the first time an H5 bird flu infection has been reported in a pig in the United States.

https://www.cdc.gov/bird-flu/situation-summary/index.html

Avian Flu The Next Pandemic?

Confirmed human case summary during the 2024 outbreak, by state and exposure source

Exposure Source

State	Cattle	Poultry	Unknown	State Total
California	30	0	1	31
Colorado	1	9	0	10
Michigan	2	0	0	2
Missouri	0	0	1	1
Oregon	0	1	0	1
Texas	1	0	0	1
Washington	0	11	0	11
Source Total	**34**	**21**	**2**	**57**

NOTE: One additional case was previously detected in a poultry worker in Colorado in 2022.

57 human cases reported in the US as of December 2, 2024.

First child reported infected with Avian Flu in California confirmed November 22, 2024 by the CDC.

There has been **one human death** reported in China in 2022.

https://www.cdc.gov/bird-flu/situation-summary/index.html

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Avian Flu The Next Pandemic?

Recent Events

- **H5N1 detection in U.S. Pigs**
  - Oregon
    - » Backyard multi-species farm with recent poultry outbreak
    - » Shared water source, housing, equipment
  - Pigs – known mixing vessel for zoonotic and human influenza viruses
  - Unclear if pigs were systematically infected or positive due to on-farm contamination
- **H5N1 Case in Canada**
  - Identified through routine influenza testing
  - 18-year-old with no underlying medical conditions
  - Conjunctivitis, hospitalized in critical condition
  - Investigation into exposure(s) ongoing
  - Virus genotype related to poultry outbreak in B.C.
- **H5N1 Pediatric Case in California**
  - Identified through routine influenza testing
  - Mild UR symptoms
  - No known exposure to animals
  - Treated with antivirals and recovered

Avian Flu The Next Pandemic?

INFECTION CONTROL

- Follow standard, contact and airborne precautions
- If AIIR not available, isolate the patient in a private room
- Health care personnel should wear recommended PPE when providing patient care.

DIAGNOSTIC TESTING

- Test for influenza
  - 3 nasal swabs, 2 for Division of Laboratory Services
  - Rule out other URI's
  - If Influenza A (+): send to state lab for further identification, obtain exposure history

TREATMENT

- Oral oseltamivir:
  - Twice daily x 5 days
- Do not delay antiviral treatment while waiting on laboratory test results
- Current antivirals are effective

Avian Flu The Next Pandemic?

HPAI Public Health Risk

Overall risk to general public remains LOW

- Those with occupational exposure may have higher risk of infection
- Dairy (commercially pasteurized) and meat supply is safe for consumption
- We will continue to monitor and respond to the changing situation

INFLUENZA VACCINE

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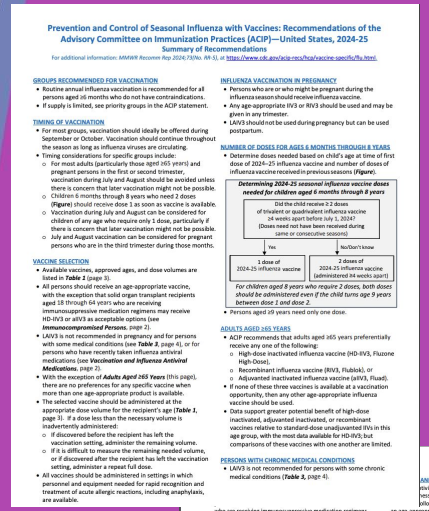
Influenza Vaccine

The ACIP recommends that everyone over 6 months of age who do not have contraindications get a flu shot.

https://www.cdc.gov/flu/media/pdfs/2024/08/acip-2024-25-summary-of-recommendations.pdf



Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP)—United States, 2024-25

Summary of Recommendations

For additional information: MMWR Recomm Rep 2024;73(No. RR-5). or https://www.cdc.gov/acip-recs/hcp/vaccine-specific/flu.html.

GROUPS RECOMMENDED FOR VACCINATION

- Routine annual influenza vaccination is recommended for all persons aged ≥6 months who do not have contraindications.
- If supply is limited, see priority groups in the ACIP statement.

TIMING OF VACCINATION

- For most groups, vaccination should ideally be offered during September or October. Vaccination should continue throughout the season as long as influenza viruses are circulating.
- Timing considerations for specific groups include:
  - For most adults (particularly those aged ≥65 years) and pregnant persons in the first or second trimester, vaccination during July and August should be avoided unless there is concern that later vaccination might not be possible.
  - Children 6 months through 8 years who need 2 doses (**Figure**) should receive dose 1 as soon as vaccine is available.
  - Vaccination during July and August can be considered for children of any age who require only 1 dose, particularly if there is concern that later vaccination might not be possible.
  - July and August vaccination can be considered for pregnant persons who are in the third trimester during those months.

VACCINE SELECTION

- Available vaccines, approved ages, and dose volumes are listed in ***Table 1*** (page 3).
- All persons should receive an age-appropriate vaccine, with the exception that solid organ transplant recipients aged 18 through 64 years who are receiving immunosuppressive medication regimens may receive HD-IIV3 or aIIV3 as acceptable options (see ***Immunocompromised Persons***, page 2).
- LAIV3 is not recommended in pregnancy and for persons with some medical conditions (see ***Table 2***, page 4), or for persons who have recently taken influenza antiviral medications (see ***Vaccination and Influenza Antiviral Medications***, page 2).
- With the exception of ***Adults Aged ≥65 Years*** (this page), there are no preferences for any specific vaccine when more than one age-appropriate product is available.
- The selected vaccine should be administered at the appropriate dose volume for the recipient's age (***Table 1***, page 3). If a dose less than the necessary volume is inadvertently administered:
  - If discovered before the recipient has left the vaccination setting, administer the remaining volume.
  - If it is difficult to measure the remaining needed volume, or if discovered after the recipient has left the vaccination setting, administer a repeat full dose.
- All vaccines should be administered in settings in which personnel and equipment needed for rapid recognition and treatment of acute allergic reactions, including anaphylaxis, are available.

INFLUENZA VACCINATION IN PREGNANCY

- Persons who are or who might be pregnant during the influenza season should receive influenza vaccine.
- Any age-appropriate IIV3 or RIV3 should be used and may be given in any trimester.
- LAIV3 should not be used during pregnancy but can be used postpartum.

NUMBER OF DOSES FOR AGES 6 MONTHS THROUGH 8 YEARS

- Determine doses needed based on child's age at time of first dose of 2024–25 influenza vaccine and number of doses of influenza vaccine received in previous seasons (***Figure***).

Determining 2024-25 seasonal influenza vaccine doses needed for children aged 6 months through 8 years

Did the child receive ≥ 2 doses of trivalent or quadrivalent influenza vaccine ≥4 weeks apart before July 1, 2024? (Doses need not have been received during same or consecutive seasons)

Yes → 1 dose of 2024–25 influenza vaccine

No/Don't know → 2 doses of 2024–25 influenza vaccine (administered ≥4 weeks apart)

For children aged 8 years who require 2 doses, both doses should be administered even if the child turns age 9 years between dose 1 and dose 2.

- Persons aged ≥9 years need only one dose.

ADULTS AGED ≥65 YEARS

- ACIP recommends that adults aged ≥65 years preferentially receive any one of the following:
  - High-dose inactivated influenza vaccine (HD-IIV3, Fluzone High-Dose),
  - Recombinant influenza vaccine (RIV3, Flublok), or
  - Adjuvanted inactivated influenza vaccine (aIIV3, Fluad).
- If none of these three vaccines is available at a vaccination opportunity, then any other age-appropriate influenza vaccine should be used.
- Data support greater potential benefit of high-dose inactivated, adjuvanted inactivated, or recombinant vaccines relative to standard-dose unadjuvanted IIVs in this age group, with the most data available for HD-IIV3; but comparisons of these vaccines with one another are limited.

PERSONS WITH CHRONIC MEDICAL CONDITIONS

- LAIV3 is not recommended for persons with some chronic medical conditions (***Table 2***, page 4).

who are receiving immunosuppressive medication regimens may receive HD-IIV3 or aIIV3 as acceptable options (without a preference over other age-appropriate IIV3s or RIV3).

- Immune response might be reduced in persons on certain medications, chemotherapy, or transplant regimens.
- The Infectious Diseases Society of America (IDSA) has published guidance concerning the timing of vaccination in relation to such interventions (see ***Further information***, this page).

CAREGIVERS AND CONTACTS OF HIGH-RISK PERSONS

- Caregivers and contacts (including those of immunosuppressed persons) may receive any age-appropriate IIV3 or RIV3.
- LAIV3 may be given to caregivers and contacts of persons who are not severely immunocompromised (i.e., who do not require a protected environment).
- Health care personnel or hospital visitors who receive LAIV3 should avoid caring for/contact with severely immunosuppressed persons who require a protected environment for 7 days after vaccination.

PERSONS WITH EGG ALLERGY

- Multiple studies indicate that egg-allergic persons are not at increased risk of severe allergic reactions to egg-based influenza vaccines.
- Any influenza vaccine that is otherwise appropriate for the recipient's age and health status (egg based or non-egg based) can be administered to persons with egg allergy.
- Egg allergy necessitates no additional safety measures for influenza vaccination beyond those recommended for any recipient of any vaccine.
- Regardless of allergy history, all vaccines should be administered in settings in which personnel and equipment needed for rapid recognition and treatment of acute allergic reactions, including anaphylaxis, are available.

PREVIOUS SEVERE ALLERGIC REACTIONS TO INFLUENZA VACCINE

- Recommendations for persons with a previous severe allergic reaction to an influenza vaccine are summarized in ***Tables 3*** and ***4*** (page 4).

VACCINATION ISSUES FOR TRAVELERS

- Travelers who wish to reduce risk for influenza should consider vaccination, preferably ≥2 weeks before departure.
- Persons at higher risk for complications of influenza who were not vaccinated during the preceding fall or winter should consider influenza vaccination before departure, if planning to travel to the tropics, with organized tourist groups, on cruise ships, or to the Southern Hemisphere during April-September.
- Southern Hemisphere influenza vaccines might differ in viral composition from Northern Hemisphere formulations.
- Administration of Southern Hemisphere influenza vaccine before Southern Hemisphere travel might be reasonable, but these formulations are generally unavailable in the U.S.

AND INFLUENZA ANTIVIRAL MEDICATIONS

…rivirals given before or after LAIV3 might reduce …ess. Persons who receive influenza antivirals …following intervals should be revaccinated with an age-appropriate IIV3 or RIV3 (intervals might be longer in conditions where medication clearance is delayed).

Influenza Antiviral	Estimated window for potential interference
Oseltamivir and Zanamivir	48 hours before to 2 weeks after LAIV3
Peramivir	5 days before to 2 weeks after LAIV3
Baloxavir	17 days before to 2 weeks after LAIV3

SIMULTANEOUS ADMINISTRATION WITH OTHER VACCINES

- IIV3s and RIV3 may be administered simultaneously or sequentially with other live or inactivated vaccines.
- LAIV3 may be administered simultaneously with other inactivated or live vaccines. If not given simultaneously, then ≥4 weeks should pass between administration of LAIV3 and another live vaccine.
- Injectable vaccines given simultaneously should be administered at separate anatomic sites ≥1 inch apart.
- Consider using non-adjuvanted influenza vaccine if giving another vaccine with non-aluminum adjuvant simultaneously (but vaccination should not be delayed to obtain a nonadjuvanted influenza vaccine).
- Consult current CDC/ACIP recommendations and guidance for up to date information concerning newer vaccines.

VACCINE ADVERSE EVENT REPORTING SYSTEM (VAERS)

- Health care providers are required to report to VAERS any adverse event listed by the vaccine manufacturer as a contraindication to further doses of that vaccine, and also are required to report adverse events listed here: https://vaers.hhs.gov/docs/VAERS_Table_of_Reportable_Events_Following_Vaccination.pdf. They are encouraged to report any clinically significant adverse event after vaccination to VAERS.
- Instructions on how to report: https://vaers.hhs.gov

FURTHER INFORMATION

CDC information (for more, call 800-232-4636)

- General influenza page: www.cdc.gov/flu
- FluView (weekly U.S. surveillance): www.cdc.gov/flu/weekly
- Influenza Antiviral Guidance: https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm
- Vaccine Storage and Handling Toolkit: https://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/index.html
- General Best Practice Guidelines for Immunization: https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html

American Academy of Pediatrics (AAP) Guidance: https://redbook.solutions.aap.org/selfservice/pages.aspx?selfservicentrid=influenza-resources

IDSA Guidance for vaccination of immunocompromised hosts: https://academic.oup.com/cid/article/58/3/e44/334337

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Influenza Vaccine

U.S. Influenza Vaccines, Age Indications, Dosage and Administration, and Contraindications and Precautions

Note: *all U.S. 2024-25 influenza vaccines will be trivalent, containing hemagglutinin derived from 3 influenza viruses: one each of influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B/Victoria. Quadrivalent vaccines containing influenza B/Yamagata will not be available due to absence of detection of naturally occurring B/Yamagata viruses in global surveillance since March, 2020.*

For package inserts see: https://www.fda.gov/vaccines-blood-biologics/vaccines/vaccines-licensed-use-united-states

Table 1: Inactivated Influenza Vaccines (IIV3s) and Recombinant Influenza Vaccine (RIV3)

Trade Name (*Manufacturer*)	Presentations	Approved ages	Volume per dose by age	CPT Code	Comments
IIV3s: Standard-dose (15 µg HA per virus component in 0.5 mL; 7.5 µg in 0.25 mL					
Afluria (*Seqirus*)	0.5 mL PFS	≥3 yrs†	≥3 yrs—0.5 mL†	90656	Dose from MDV can be given by jet injector for 18-64 yrs only. Egg-based.
	5.0 mL MDV*	≥6 mos†	6 through 35 mos—0.25 mL†	90657	
			≥3 yrs—0.5 mL†	90658	
Fluarix (*GlaxoSmithKline*)	0.5 mL PFS	≥6 mos	≥6 mos—0.5 mL	90656	Egg-based.
Flucelvax (*Seqirus*)	0.5 mL PFS	≥6 mos	≥6 mos —0.5 mL	90661	Cell culture-based.
	5.0 mL MDV*	≥6 mos	≥6 mos —0.5 mL	90661	
FluLaval (*GlaxoSmithKline*)	0.5 mL PFS	≥6 mos	≥6 mos—0.5 mL	90656	Egg-based.
Fluzone (*Sanofi Pasteur*)	0.5 mL PFS	≥6 mos§	≥3 yrs—0.5 mL§	90656	Either 0.25 or 0.5 mL approved for ages 6-35 months. Egg-based.
	5.0 mL MDV*	≥6 mos§	6 through 35 mos—0.25 mL ***or*** 0.5 mL§	90657 90658	
			≥3 yrs—0.5 mL§	90658	
HD-IIV3: High-dose (60 µg hemagglutinin per virus component in 0.5 mL)					
Fluzone High-Dose (*Sanofi Pasteur*)	0.5 mL PFS	≥65 yrs	≥65 yrs—0.5 mL	90662	One of 3 options preferred for ≥65 years. Egg-based.
aIIV3: Standard-dose, with MF59 adjuvant (15 µg hemagglutinin per virus component in 0.5 mL)					
Fluad (*Seqirus*)	0.5 mL PFS	≥65 yrs	≥65 yrs—0.5 mL	90653	One of 3 options preferred for ≥65 years. Egg-based.
RIV3: Recombinant HA (45 µg hemagglutinin per virus component in 0.5 mL)					
Flublok (*Sanofi Pasteur*)	0.5 mL PFS	≥18 yrs	≥18 yrs—0.5 mL	90673	One of 3 options preferred for ≥65 years.

CPT=Current Procedural Terminology; HA = hemagglutinin; MDV=multidose vial; PFS=prefilled syringe

* Contains thimerosal as a preservative agent.

† The dose volume for Afluria is 0.25 mL for children 6 through 35 months and 0.5 mL for persons ≥3 years. Prefilled 0.25-mL syringes are no longer available. For children 6 through 35 months, a 0.25-mL dose must be obtained from a multidose vial.

§ Per the package insert, Fluzone is approved for children aged 6 through 35 months at either 0.25 mL or 0.5 mL per dose. Prefilled 0.25-mL syringes are no longer available. However, 0.5mL prefilled syringes can be used for this age group.

Administration of IIV3s and RIV3

- IIV3s and RIV3 are administered intramuscularly (IM). For adults and older children, the deltoid is the preferred site. For infants and younger children, the anterolateral thigh is the preferred site. For detailed guidance for administration sites and needle length, see the General Best Practice Guidelines for Immunization (see ***Further Information***, page 2).

Table 2: Live Attenuated Influenza Vaccine (LAIV3) — 10 [6.5-7.5] fluorescent focus units live attenuated virus in 0.2 mL

Trade name/*Manufacturer*	Presentations	Approved ages	Volume per dose	CPT code	Comment
FluMist (*AstraZeneca*)	0.2 mL prefilled single-use intranasal sprayer	2 through 49 yrs	0.1 mL each nostril (0.2 mL total)	90660	Egg-based.

Administration of LAIV3

- LAIV3 is administered intranasally. Half of the total sprayer contents is sprayed into the first nostril while the recipient is in the upright position. The attached divider clip is removed and the second half is administered into the other nostril.
- If the vaccine recipient sneezes immediately after administration, the dose should not be repeated.
- If nasal congestion is present that might interfere with delivery of the vaccine to the nasopharyngeal mucosa, deferral should be considered, or another age-appropriate vaccine should be administered.

Abbreviations for main vaccine types:	*Prefixes sometimes used for specific vaccines:*
IIV3 = Inactivated influenza vaccine	**cc** for cell culture based IIV (e.g., ccIIV3)
RIV3 = Recombinant influenza vaccine	**a** for adjuvanted IIV (e.g., aIIV3)
LAIV3 = Live attenuated Influenza Vaccine	**HD** for high-dose IIV (e.g., HD-IIV3)

Table 3: Influenza Vaccine Contraindications and Precautions

Egg-based IIV3s	**Contraindications:** • History of severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine (other than egg), or to a previous dose of any influenza vaccine (any egg-based IIV, ccIIV, RIV, or LAIV of any valency) **Precautions:** • Moderate or severe acute illness with or without fever • History of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine
ccIIV3	**Contraindications:** • History of severe allergic reaction (e.g., anaphylaxis) to ccIIV of any valency, or to any component of ccIIV3 **Precautions:** • Moderate or severe acute illness with or without fever • History of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine • History of severe allergic reaction to a previous dose of any other influenza vaccine (any egg-based IIV, RIV, or LAIV of any valency)
RIV3	**Contraindications:** • History of severe allergic reaction (e.g., anaphylaxis) to RIV of any valency, or to any component of RIV3 **Precautions:** • Moderate or severe acute illness with or without fever • History of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine • History of severe allergic reaction to a previous dose of any other influenza vaccine (any egg-based IIV, ccIIV, or LAIV of any valency)
LAIV3	**Contraindications:** • History of severe allergic reaction (e.g., anaphylaxis) to any component of the vaccine (other than egg) or to a previous dose of any influenza vaccine (i.e, any egg-based IIV, ccIIV, RIV, or LAIV of any valency) • Concomitant aspirin or salicylate-containing therapy in children and adolescents • Children aged 2 through 4 years who have received a diagnosis of asthma or 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 whose medical record indicates a wheezing episode has occurred during the preceding 12 months • Children and adults who are immunocompromised due to any cause, including but not limited to medications, congenital or acquired immunodeficiency states, HIV infection, anatomic asplenia, or functional asplenia (e.g., due to sickle-cell anemia) • Close contacts and caregivers of severely immunosuppressed persons who require a protected environment • Pregnancy • Persons with active communication between the CSF and the oropharynx, nasopharynx, nose, or ear or any other cranial CSF leak • Persons with cochlear implants (due to potential for CSF leak, which might exist for some period of time after implantation. Providers might consider consultation with a specialist concerning risk of persistent CSF leak if an age-appropriate inactivated or recombinant vaccine cannot be used) • Receipt of influenza antiviral medication within the previous 48 hours for oseltamivir and zanamivir, 5 days for peramivir, and 17 days for baloxavir (see ***Vaccination and influenza antiviral medications***, page 2, for additional guidance) **Precautions:** • Moderate or severe acute illness with or without fever • History of Guillain-Barré syndrome within 6 weeks of receipt of influenza vaccine • Asthma in persons aged ≥5 years • Other underlying medical conditions that might predispose to complications from influenza (e.g., chronic pulmonary, cardiovascular [except isolated hypertension], renal, hepatic, neurologic, hematologic, or metabolic disorders [including diabetes mellitus])

Table 4: Contraindications and Precautions for Persons with a History of Severe Allergic Reaction to an Influenza Vaccine

Vaccine (of any valency) associated with previous severe allergic reaction (e.g., anaphylaxis)	Available 2024–25 influenza vaccines		
	Egg-based IIV3s and LAIV3	ccIIV3	RIV3
Any egg-based IIV or LAIV	Contraindication*	Precaution†	Precaution†
Any ccIIV	Contraindication*	Contraindication*	Precaution†
Any RIV	Contraindication*	Precaution†	Contraindication*
Unknown influenza vaccine	Allergist consultation recommended		

When a contraindication is present, a vaccine should not be administered. In addition to the contraindications based on history of severe allergic reaction to influenza vaccines noted in the Table, each individual influenza vaccine is contraindicated for persons who have had a severe allergic reaction (e.g., anaphylaxis) to any component of that vaccine. Vaccine components can be found in package inserts. Although a history of severe allergic reaction (e.g., anaphylaxis) to egg is a labeled contraindication to the use of egg-based IIV3s and LAIV3, ACIP makes an exception for allergy to egg (see ***Persons with Egg Allergy, page 2).

†When a precaution is present, vaccination should generally be deferred but might be indicated if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Providers can consider using vaccines for which there is a precaution; however, vaccination should occur in an inpatient or outpatient medical setting with supervision by a health care provider who is able to recognize and manage severe allergic reactions. Providers can also consider consulting with an allergist to help determine which vaccine component is responsible for the allergic reaction.

Influenza Vaccine

U.S. Influenza Vaccines, Age Indications, Dosage and Administration, and Contraindications and Precautions

Note: all U.S. 2024-25 influenza vaccines will be trivalent, containing hemagglutinin derived from 3 influenza viruses: one each of influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B/Victoria. Quadrivalent vaccines containing influenza B/Yamagata will not be available due to absence of detection of naturally occurring B/Yamagata viruses in global surveillance since March, 2020.

https://www.cdc.gov/flu/media/pdfs/2024/08/acip-2024-25-summary-of-recommendations.pdf

Table 1: Inactivated Influenza Vaccines (IIV3s) and Recombinant Influenza Vaccine (RIV3)

Trade Name (*Manufacturer*)	Presentations	Approved ages	Volume per dose by age	CPT Code	Comments
IIV3s: Standard-dose (15 µg HA per virus component in 0.5 mL; 7.5 µg in 0.25 mL					
Afluria (*Seqirus*)	0.5 mL PFS 5.0 mL MDV*	≥3 yrs† ≥6 mos†	≥3 yrs—0.5 mL† 6 through 35 mos—0.25 mL† ≥3 yrs—0.5 mL†	90656 90657 90658	Dose from MDV can be given by jet injector for 18-64 yrs only. Egg-based.
Fluarix (*GlaxoSmithKline*)	0.5 mL PFS	≥6 mos	≥6 mos—0.5 mL	90656	Egg-based.
Flucelvax (*Seqirus*)	0.5 mL PFS 5.0 mL MDV*	≥6 mos ≥6 mos	≥6 mos —0.5 mL ≥6 mos —0.5 mL	90661 90661	Cell culture-based.
FluLaval (*GlaxoSmithKline*)	0.5 mL PFS	≥6 mos	≥6 mos—0.5 mL	90656	Egg-based.
Fluzone (*Sanofi Pasteur*)	0.5 mL PFS 5.0 mL MDV*	≥6 mos§ ≥6 mos§	≥3 yrs—0.5 mL§ 6 through 35 mos—0.25 mL ***or*** 0.5 mL§ ≥3 yrs—0.5 mL§	90656 90657 90658 90658	Either 0.25 or 0.5 mL approved for ages 6-35 months. Egg-based.
HD-IIV3: High-dose (60 µg hemagglutinin per virus component in 0.5 mL)					
Fluzone High-Dose (*Sanofi Pasteur*)	0.5 mL PFS	≥65 yrs	≥65 yrs—0.5 mL	90662	One of 3 options preferred for ≥65 years. Egg-based.
aIIV3: Standard-dose, with MF59 adjuvant (15 µg hemagglutinin per virus component in 0.5 mL)					
Fluad (*Seqirus*)	0.5 mL PFS	≥65 yrs	≥65 yrs—0.5 mL	90653	One of 3 options preferred for ≥65 years. Egg-based.
RIV3: Recombinant HA (45 µg hemagglutinin per virus component in 0.5 mL)					
Flublok (*Sanofi Pasteur*)	0.5 mL PFS	≥18 yrs	≥18 yrs—0.5 mL	90673	One of 3 options preferred for ≥65 years.

Table 2: Live Attenuated Influenza Vaccine (LAIV3) — $10^{6.5\text{-}7.5}$ fluorescent focus units live attenuated virus in 0.2 mL

Trade name/*Manufacturer*	Presentations	Approved ages	Volume per dose	CPT code	Comment
FluMist (*AstraZeneca*)	0.2 mL prefilled single-use intranasal sprayer	2 through 49 yrs	0.1 mL each nostril (0.2 mL total)	90660	Egg-based.

Influenza Vaccine

- **Proven safe and effective for over 75 years**
  - Jonas Salk was one of the original researchers
- **Goal of vaccination:**
  - Highly effective at preventing hospitalization and death
  - **Typically 40% - 60% effective**
- **Annual flu vaccination is the first line of defense**

High Risk Populations

- **Children younger than 5-years-old, especially those younger than 2-years-old.**
- **Individuals (all ages) with chronic diseases such as asthma, diabetes, cardiovascular diseases and obesity**
- **Individuals 65 years and older**
- **Pregnant women (infection with influenza can trigger premature birth)**

Flu Vaccination and Egg Allergy

The main change in the flu vaccine recommendations is related to giving flu vaccine to people with egg allergies.

- Most flu vaccines today continue to be produced using an egg-based manufacturing process and therefore contain a small amount of egg proteins, such as ovalbumin.

- While ACIP has *previous*ly recommended that all people 6 months and older with egg allergy should be vaccinated for flu, in the past there have been additional safety measures recommended for administration of egg-based flu vaccine to people who have had severe allergic reactions to egg.

- The ACIP voted that people with egg-allergy may receive any flu vaccine (egg-based or non-egg based) that is otherwise appropriate for their age and health status.

- Additional safety measures are no longer recommended for flu vaccination beyond those recommended for receipt of any vaccine.

Flu Vaccination Timing

It is not too late!

The recommended timing of flu vaccination has not changed.

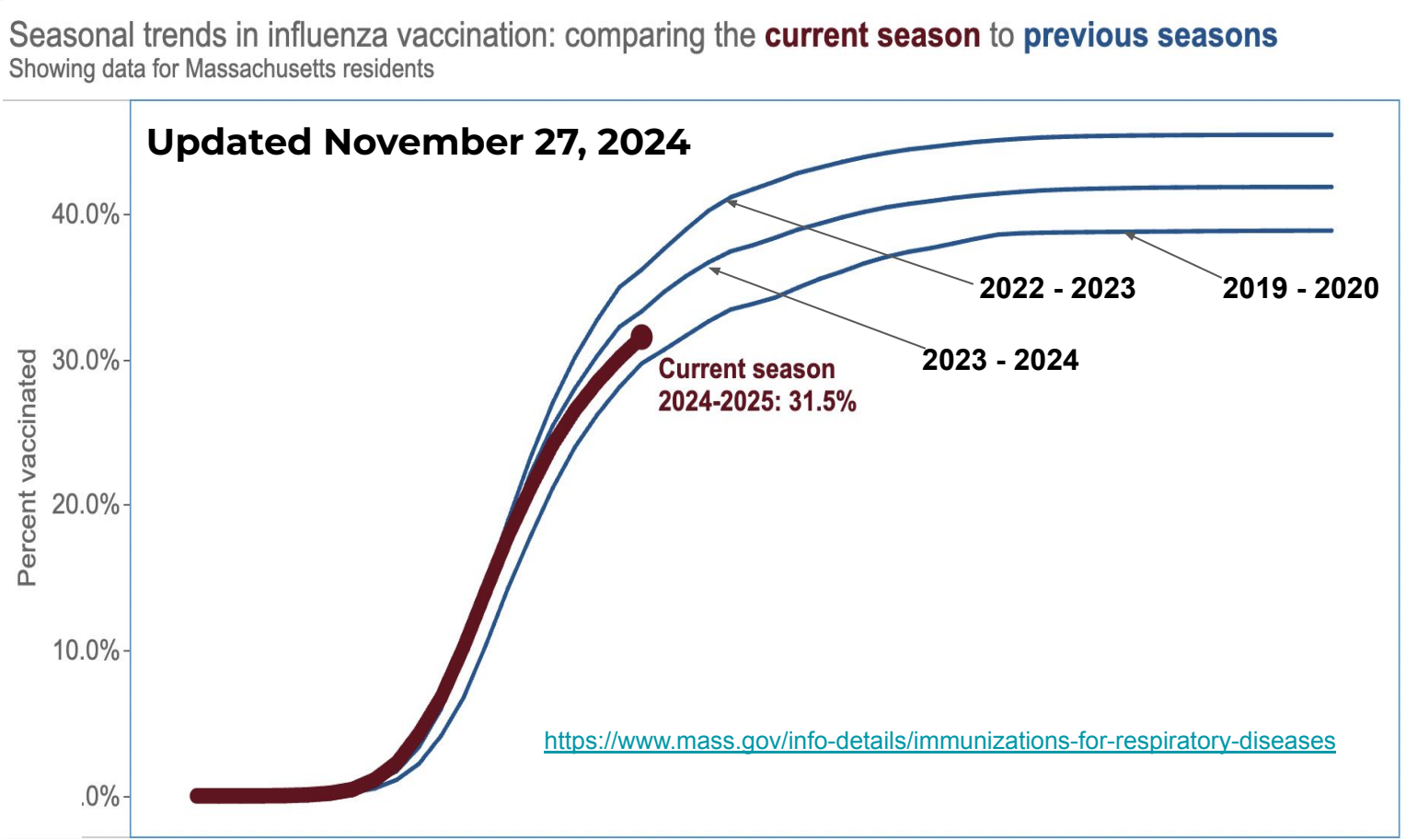
- September and October are the best times for most people to get vaccinated.
- Flu vaccination in July and August is not recommended for most people, but there are several considerations regarding vaccination in July and August for specific groups of people:
  - **For adults** (especially those 65 years old and older) and pregnant people in the first and second trimester, vaccination in July and August should be avoided unless it won't be possible to vaccinate in September or October.
  - **Pregnant people** who are in their third trimester can get a flu vaccine in July or August in order to ensure their babies are protected from flu after birth, when they are too young to get vaccinated.
  - **Children** who need two doses of flu vaccine should get their first dose of vaccine as soon as vaccine becomes available. The second dose should be given at least four weeks after the first.
- Vaccination in July or August can be considered for children who have health care visits during these months, if there might not be another opportunity to vaccinate them.
- For example, some children might have medical visits in the late summer before school starts and might not return to see a health care provider in September or October.

National Vaccine Data

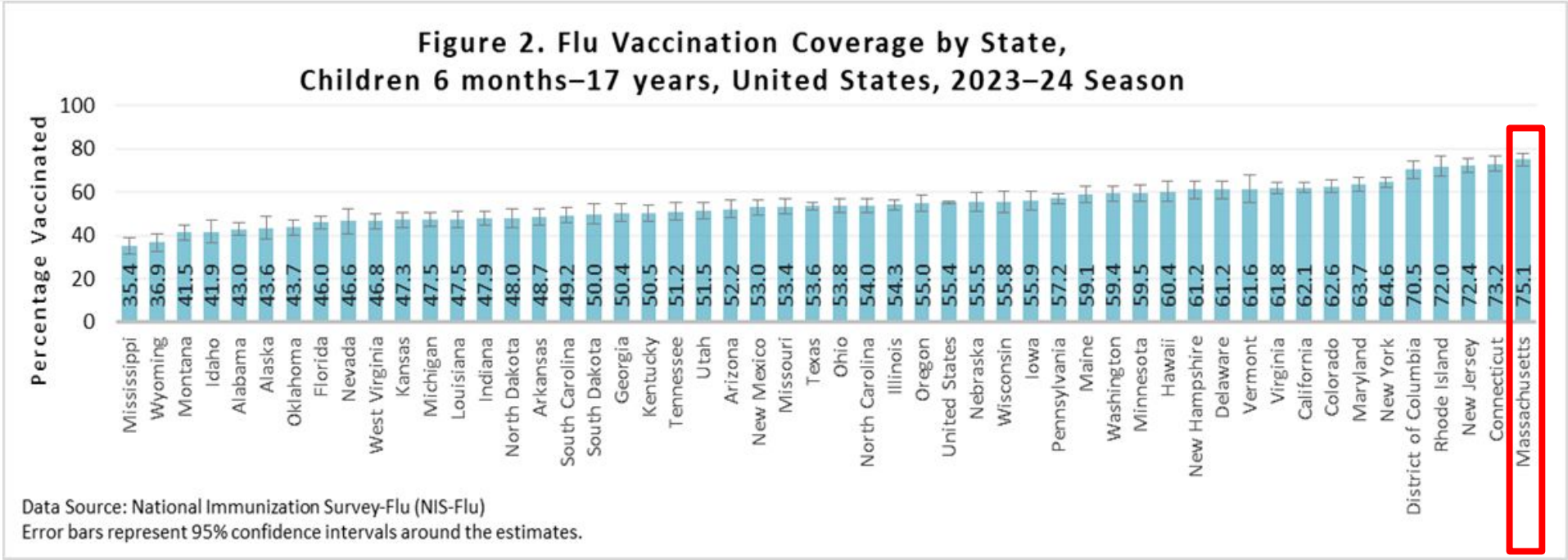
- **Vaccine rates 2023-2024 flu season as of April 6, 2024**
  - 53 % for 6 months - 17 years old
    - 2.2% lower than last season
    - 9.2% lower than pre-pandemic rates
  - 48.9% for adults 18 years and older
    - 2.7% higher than last season
    - 78.4% for adults 75 yo and above
  - 38% for pregnant persons
    - 2.8% lower than last season
- Per CDC, for the 2022-2023 season influenza vaccine was **71% effective** at preventing symptomatic Influenza A in patients less than 18 years of age

CDC Weekly Flu Vaccination Dashboard

Massachusetts Influenza Data



Massachusetts Influenza Data



https://www.cdc.gov/fluvaxview/coverage-by-season/2023-2024.html

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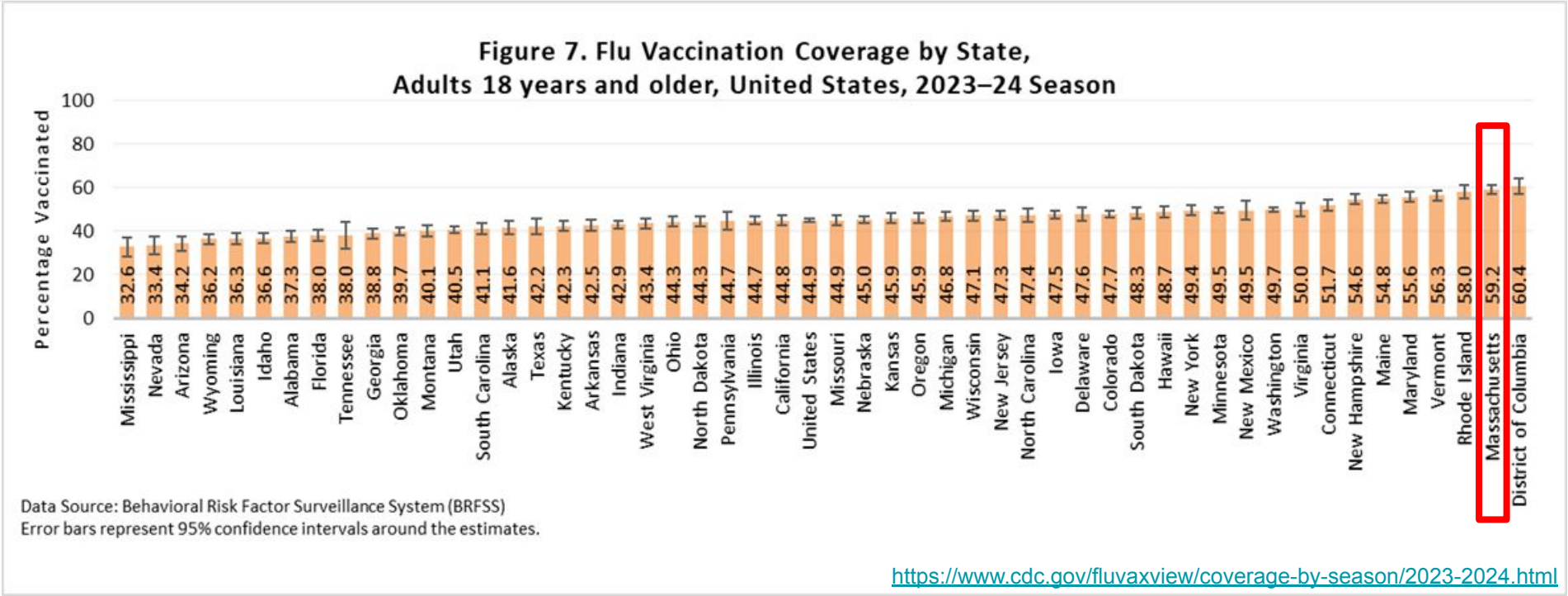
Massachusetts Influenza Data



https://www.cdc.gov/fluvaxview/coverage-by-season/2023-2024.html

MYTHS AND MISCONCEPTIONS

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Mythbusters and Messaging

Myth:

"I don't need the vaccine because I am not high risk. I am healthy."

- "A seatbelt may not always work in a car accident, but it is your best protection against serious injury, just like the flu vaccine"

- "Vaccines aren't just meant to protect you, but also those around you who may have underlying conditions or weaker immune systems"

- "Once you hit the age of 65+, it becomes harder for your body to fight off serious infections"

Mythbusters and Messaging

Myth:

"I don't need the vaccine because I am not high risk. I am healthy."

Fact:

- Vaccinations are intended to ***keep*** you healthy
- Influenza vaccine protects the body before you get sick
- If you get Influenza it may be mild, but for those at high risk, getting infected could be fatal!
- You can infect someone 24 hrs before you know you are sick

Mythbusters and Messaging

Myth:

“I got sick right after getting an Influenza vaccination.”

Fact:

- It takes 2 weeks for the vaccine to provide full protection
- You may have already been infected prior to vaccination, or become infected shortly after vaccination
- You may have been infected by another virus, one that has similar symptoms to Influenza

Mythbusters and Messaging

Myth:

“The Influenza vaccine is unsafe and has side effects.”

Fact: Influenza vaccines are very safe

- Side effects are mild and typically only last 1-2 days
  - Redness/soreness at injection site or runny nose from nasal spray
  - Occasional headache, low grade fever, and body aches
  - Risk of serious side effects are extremely rare. Less than 1-2 cases per million vaccinations recorded

CDC (2019) Flu vaccine safety information)

Mythbusters and Messaging

Myth:

“The Influenza vaccine gave me the flu.”

FACT: The Influenza vaccine cannot give you the flu

- There are 2 types of Influenza vaccines
  - Those that contain only pieces of *killed* Influenza viruses
  - Nasal spray which contain *inactivated* viruses – which the viruses have been changed so that it cannot cause influenza

Why Get Vaccinated?

- **Get yourself vaccinated and share that action with patients and colleagues**
  - Be an In**FLU**encer!
- **You won't need time off from work due to Influenza**
  - HCW who are vaccinated take 50% fewer sick days
- **You won't need to pay for a doctor visit and medications to treat Influenza**
  - Vaccinated HCW typically have 44% less doctor visits

Poland et al (2005). Vaccine 23, 2251-2255.

- **You won't need to cancel activities with friends and family because you have Influenza, especially important for the Holiday Season**
  - Vaccinated HCW have 59% less illness during vacation time

FAMILIES FIGHTING FLU

If you won't do it for yourself, do it for those you love and who love you!

Why Get Vaccinated?

Protect ***Yourself*** from Influenza

Protect your ***Patients***

Protect your ***Family*** and ***Friends***

Key Information for Respiratory Season

INFLUENZA

- Vaccination of all persons aged ≥6 months who do not have contraindications is recommended.
- Changes: Updated U.S. influenza vaccine composition for 2024–2025
  - Adults 65+ should get a high-dose or adjuvated flu vaccine
  - Persons with egg allergy: Should receive influenza vaccine, no additional safety measures required COVID-19

COVID

- Updated COVID-19 vaccines recommended for everyone aged ≥6 months old
- The vaccines are covered by insurance. Uninsured and underinsured children and adults have access to vaccines through VFC or Bridge Program.
- Dosing varies by age and previous immunization status
- No additional dose for age 65+ recommended at this time

Key Information for Respiratory Season

RSV

- RSV can cause serious illness in older adults. Certain underlying medical conditions and advanced age are associated with increased risk of severe RSV.
- Adults 60+ may receive an RSV vaccine based on shared clinical decision-making with a healthcare provider.
- Recommended in pregnancy between 32 to 36 weeks of gestation administered between September and January.
- Nirsevimab for all infants < 8 months of age and high risk infants less than 2 years of age
- In June 2024, FDA licensed AREXVY for use in people ages 50–59 who are at increased risk of RSV lower respiratory tract disease. ACIP did not hold a vote to recommend AREXVY for people ages 50–59.

Other

- ACIP recommends Pneumococcal vaccine.

We Take the Importance of Vaccines For Granted

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FIGHTING FLU

WHY DO WE NEED VACCINATIONS?

- Measles Kills 350 people/day
  - 128,000 deaths per year
- Hepatitis B 820,000 deaths/year
  - 25% of infections become chronic and result in Hepatic Cancer
- Tetanus 73,000 cases/year worldwide
  - 100% fatal in areas where ICU care is unavailable
- Pertussis
  - 26,989 cases nationwide in 2024
  - 3 deaths nationwide 2023

https://wonder.cdc.gov/nndss/static/2024/47/2024-47-table990.html

WHY DO WE NEED VACCINATIONS?

Pertussis Outbreaks 2024

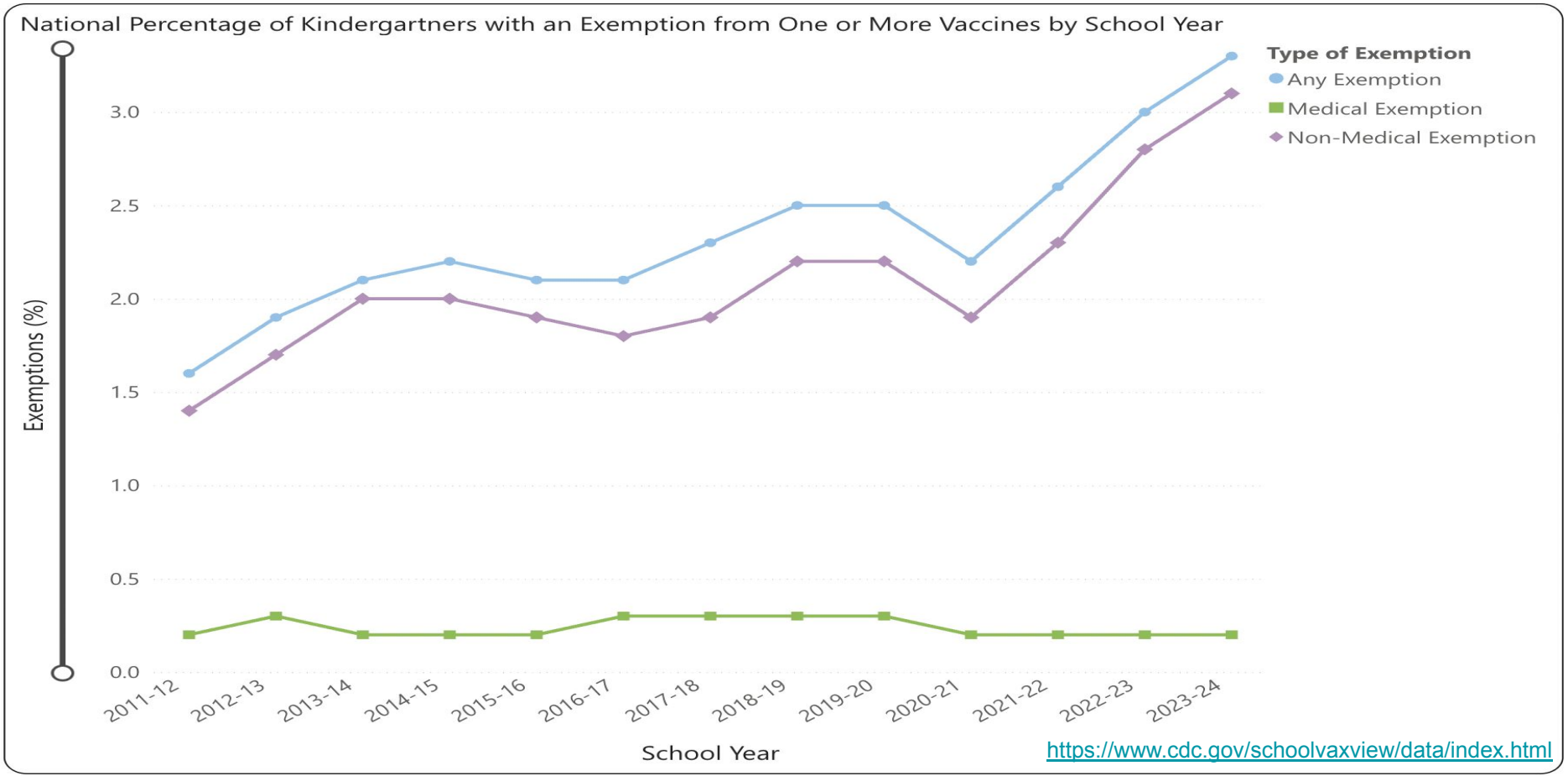
Weekly cases* of notifiable diseases, United States, U.S. Territories, and Non-U.S. Residents week ending November 23, 2024 (Week 47)

Reporting Area	Pertussis			
	Current week	Previous 52 weeks Max †	Cum YTD 2024 †	Cum YTD 2023 †
U.S. Residents, excluding U.S. Territories	577	1,190	26,989	5,593
New England	13	53	1,107	79
Connecticut	-	8	29	6
Maine	13	10	147	57
Massachusetts	**-**	**37**	**715**	**11**
New Hampshire	-	5	38	4
Rhode Island	-	9	98	1
Vermont	-	12	80	-

U: Unavailable — The reporting jurisdiction was unable to send the data to CDC or CDC was unable to process the data.
-: No reported cases — The reporting jurisdiction did not submit any cases to CDC.
N: Not reportable — The disease or condition was not reportable by law, statute, or regulation in the reporting jurisdiction.
NN: Not nationally notifiable — This condition was not designated as being nationally notifiable.
NP: Nationally notifiable but not published.
NC: Not calculated — There is insufficient data available to support the calculation of this statistic.
Cum: Cumulative year-to-date counts.
* Case counts for reporting years 2023 and 2024 are provisional and subject to change. Cases are assigned to the reporting jurisdiction submitting the case to NNDSS, if the case's country of usual residence is the U.S., a U.S. territory, unknown, or null (i.e. country not reported); otherwise, the case is assigned to the 'Non-U.S. Residents' category. Country of usual residence is currently not reported by all jurisdictions or for all conditions. For further information on interpretation of these data, see https://www.cdc.gov/nndss/data-statistics/readers-guides/.
† Previous 52 week maximum and cumulative YTD are determined from periods of time when the condition was reportable in the jurisdiction (i.e., may be less than 52 weeks of data or incomplete YTD data).

https://wonder.cdc.gov/nndss/static/2024/47/2024-47-table990.html

Vaccination Rates Are Decreasing



https://www.cdc.gov/schoolvaxview/data/index.html

Vaccination Rates Are Decreasing

	Estimated* vaccination coverage† for MMR vaccine, not up-to-date§, and exempt from one or more vaccines¶, and among children enrolled in kindergarten, by jurisdiction** United States, 2023–24 school year							
	MMR up-to-date (2 doses)††		MMR not up-to-date (2 doses)		Exempt from one or more vaccines		Percentage point difference in exempt from one or more vaccines (2022–23 to 2023–24)	Change in number exempt from one or more vaccines (2022–23 to 2023–24)
	(%)	No.	(%)	No.	(%)	No.		
National Estimate§§	92.7	3,542,964	7.3	280,508	3.3	126,747	0.3	11,172
Median§§	92.0	--	8.0	--	3.7	1,428	0.4	224
Massachusetts¶¶,§§§	96.3	63,010	3.7	2,414	1.4	939	0.0	14

Abbreviations: MMR = measles, mumps, and rubella vaccine; NA = not available; NR = not reported to CDC.

* Estimate counts and percentages are adjusted for nonresponse and weighted for sampling where appropriate.

† Estimates based on a completed vaccination series (i.e., not vaccine specific) use the "≥" symbol. In Maryland, undervaccinated children may have been counted more than once by some schools, therefore coverage estimates use the "≥" symbol. Coverage might include history of disease or laboratory evidence of immunity. In Kentucky, public schools reported numbers of children up to date with specific vaccines, and most private schools reported numbers of children who received all doses of all vaccines required for school entry.

§ Students reported as not up to date may be vaccinated but lack documentation of complete vaccination with MMR.

¶ Some jurisdictions did not report the number of children with exemptions, but instead reported the number of exemptions for each vaccine, which could count some children more than once. Lower bounds of the percentage of children with any exemptions were estimated using the individual vaccines with the highest number of exemptions. Estimates based on vaccine-specific exemptions use the "≥" symbol.

¶ Students reported as not up to date may be vaccinated but lack documentation of complete vaccination with MMR.

** Vaccination coverage and exemptions might not be mutually exclusive. Some children might have an exemptions from one or more vaccines and also have received all required doses of at least one vaccine.

†† Most states require 2 doses of MMR; Alaska, New Jersey, and Oregon require 2 doses of measles, 1 dose of mumps, and 1 dose of rubella vaccines. Georgia, New York, New York City, North Carolina, and Virginia require 2 doses of measles and mumps vaccines and 1 dose of rubella vaccine. Iowa requires 2 doses of measles vaccine and 2 doses of rubella vaccine. Wyoming requires 1 dose of MMR.

§§ National coverage and exemption estimates and medians were calculated using data from 49 states and the District of Columbia (i.e., did not include Montana, American Samoa, Guam, Marshall Islands, Federated States of Micronesia, Northern Mariana Islands, Palau, Puerto Rico, and the U.S. Virgin Islands). Data from cities were included with their state data. National grace period or provisional enrollment estimates and median were calculated using data from the 31 states that have either a grace period or provisional enrollment policy and reported relevant data to CDC. Data reported from 3,559,990 kindergartners were assessed for coverage, 3,709,432 for exemptions, and 2,748,251 for grace period or provisional enrollment. Estimates represent rates for populations of coverage and exemptions (3,823,472), and grace period or provisional enrollment (2,839,159).

¶¶ Philosophical exemptions were not allowed.

*** Reported public school data only.

††† Religious exemptions were not allowed.

§§§ Counted some or all vaccine doses received regardless of Advisory Committee on Immunization Practices recommended age and time interval; vaccination coverage rates reported might be higher than those for valid doses.

¶¶¶ Kindergarten vaccination coverage data were collected from a sample.

**** Did not include certain types of schools, such as kindergartens in child care facilities, online schools, correctional facilities, or those located on military bases or tribal lands.

†††† Kindergarten coverage data were collected from a sample, and exemption data were collected from a census of kindergartners.

§§§§ The proportion surveyed is reported as 100% but might be <100% if based on incomplete information about the actual current enrollment.

https://www.cdc.gov/schoolvaxview/data/index.html

Families Fighting Flu

Who We Are and What We Do

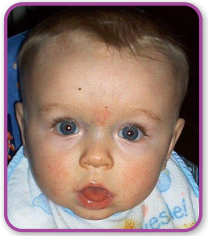
FAMILIES
FIGHTING FLU

The Power Of Storytelling

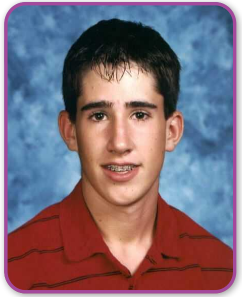
FAMILIES
FIGHTING FLU

Advocating Makes A Difference









We put a *face* on the *FLU!*


FAMILIES FIGHTING FLU









We aim to prevent more stories like ours.

Vaccinate, Test, and Treat

- Influenza doesn't discriminate; best prevention is to **vaccinate**
- **Test** if showing influenza-like symptoms
- Rapidly prescribe and administer appropriate antiviral **treatment** to reduce symptom duration and lower risk of complications

Education is critical to saving lives

FAMILIES FIGHTING FLU

Families Fighting Flu - Our Stories

A Mother's Story

Amanda Kanowitz
1999-2004

A Father's Story

Brent Teichman
1990-2019

A Survivor's Story

Kaden Stevenson
Flu Survivor December 2022

FAMILIES FIGHTING FLU

The Power of Emotional Storytelling

Healthcare decisions can be emotional for most people!

Stories are 22x more memorable than statistics!

We share stories to help prevent others from experiencing what our families have.

People *RELATE* to stories and it can change their intentions to vaccinate!

FAMILIES FIGHTING FLU

We share Our Family Stories

Educating with Videos

Madison Romero's Story

Madison Romero's Video

Latasha 'Tash' Hayne's Story

Tash Hayne's Video

FAMILIES FIGHTING FLU

The Power Of Storytelling

Cayden Smith was 3 years old

Layla, Cayden's sister, was 3 years old

The Flu Doesn't Discriminate

The Power Of Storytelling

Vaccinate. Test. Treat.

When to be on the lookout for respiratory infections:

	FLU	COVID-19	STREP THROAT	RSV
OCT	•	*Timing of Covid-19 surges vary*		•
NOV	•			•
DEC	•		•	•
JAN	•		•	•
FEB	•		•	•
MAR	•		•	•
APR	•		•	•
MAY	•			•
JUN				•
JUL				
AUG				
SEP				

Kaden Stevenson

Kaden Stevenson was an active and healthy seven-year-old who enjoyed sports and spending time with his friends. Just before Christmas 2022, Kaden came down with what his mother assumed was a common cold or possibly a stomach bug. Kaden's symptoms progressed over a couple of days, resulting in his local hospital airlifting him to a pediatric intensive care unit about 2 hours away.

As a complication of the flu, Kaden experienced toxic shock from bacteria that entered his bloodstream. Kaden's legs were amputated as a result of this flu complication.

Kaden's mother now urges everyone to get vaccinated in order to protect themselves and their loved ones from the flu.

www.familiesfightingflu.org

FAMILIES FIGHTING FLU™

G2022C

[Kaden Stevenson's story]

How We Reach All Audiences

- **Educating and advocating**
  - Grassroots
  - Social, digital, and media channels
- **Sharing our family stories**
- **Providing educational materials and resources**
- **Collaborating with trustworthy messengers and partners**
  - Peer-to-peer
  - Flu Clinics
  - Webinars
  - Events

FAMILIES FIGHTING FLU

We reach people "where they are" at local, regional, state, and national levels

We Expand Our Reach By Working Together

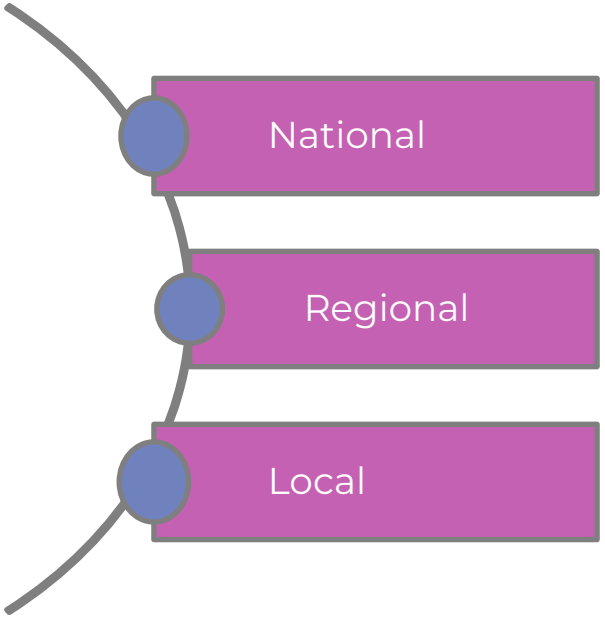
Families personally impacted by the flu

Healthcare professionals

Partners

- Community organizations
- Immunization coalitions
- Health departments
- Others

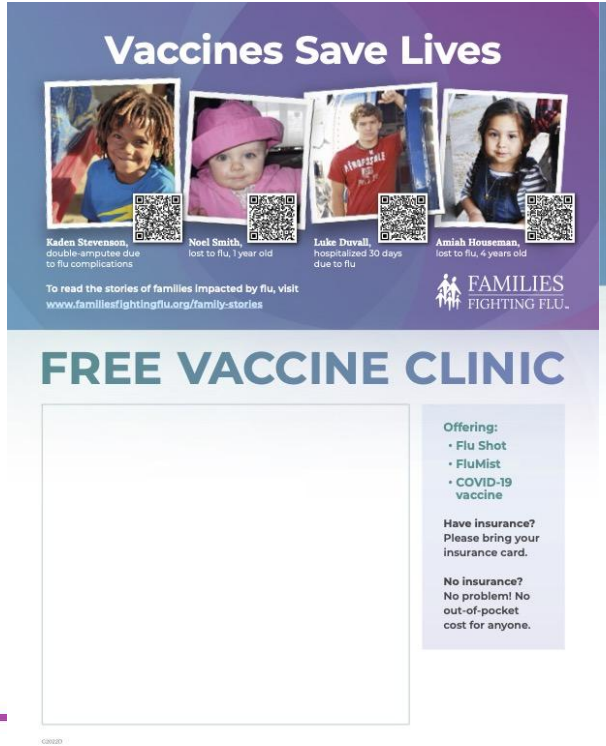
Individuals who support flu awareness

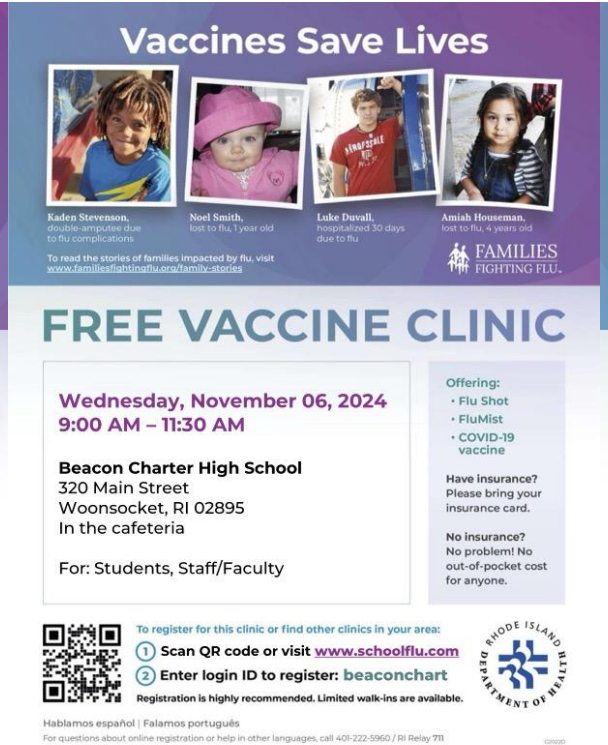


FAMILIES FIGHTING FLU

We Tailor Our Resources for your Audience

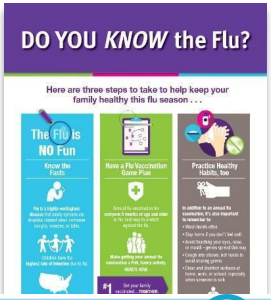
Educating with Print & Digital Resources

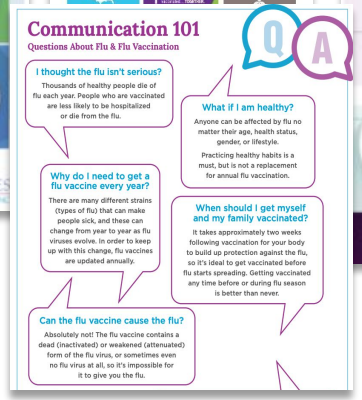


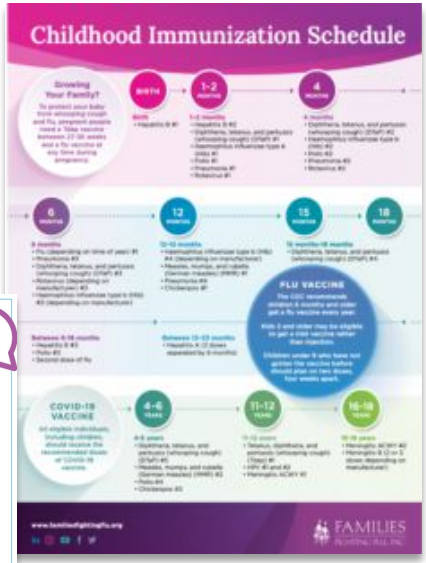


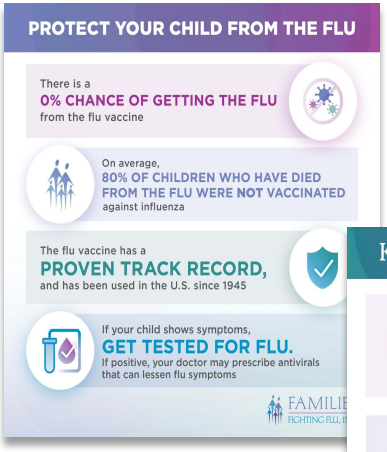
FFF Educational Resources
Continuously Expanding

Toolkits ***Educational Materials*** ***Spanish*** ***Social Media***







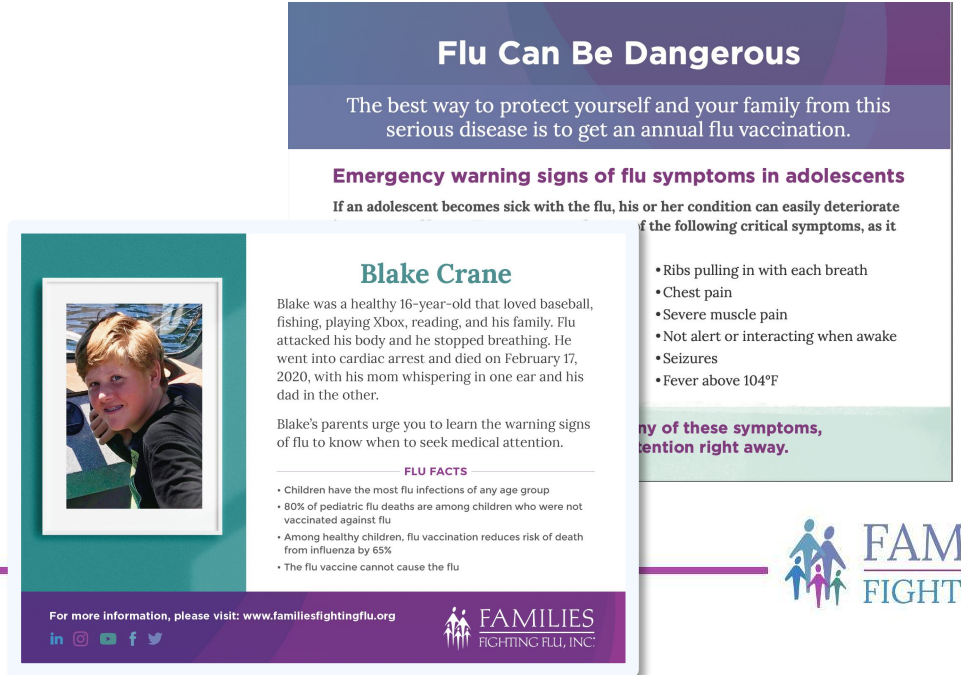


FAMILIES FIGHTING FLU

We Share Our Family Stories

Educating with Print & Digital Resources

Story Postcard & Warning Signs



Social Media Graphics

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The Role Of The Healthcare Professional

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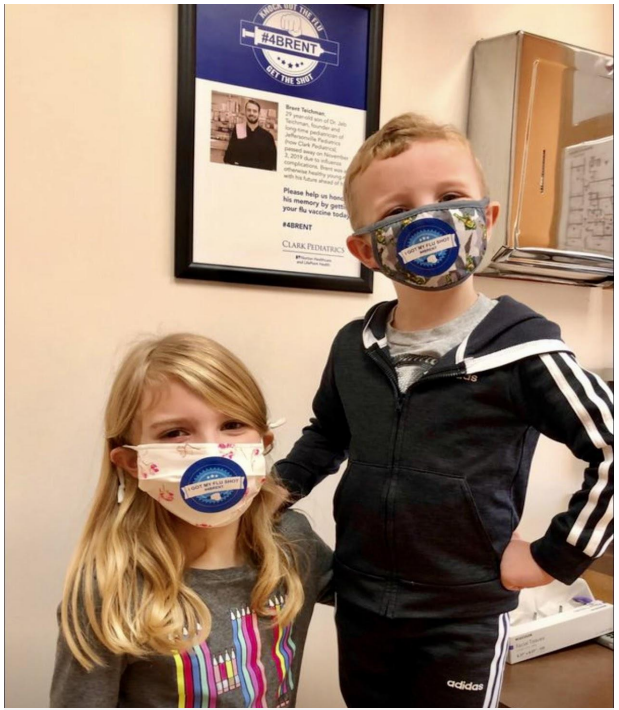
The Role of Healthcare Professionals

- Trusted resource
- Educate & inform patients
- Protect public health
- Set the example!



A recommendation for all vaccinations from a healthcare professional is critically important for improving vaccination rates!

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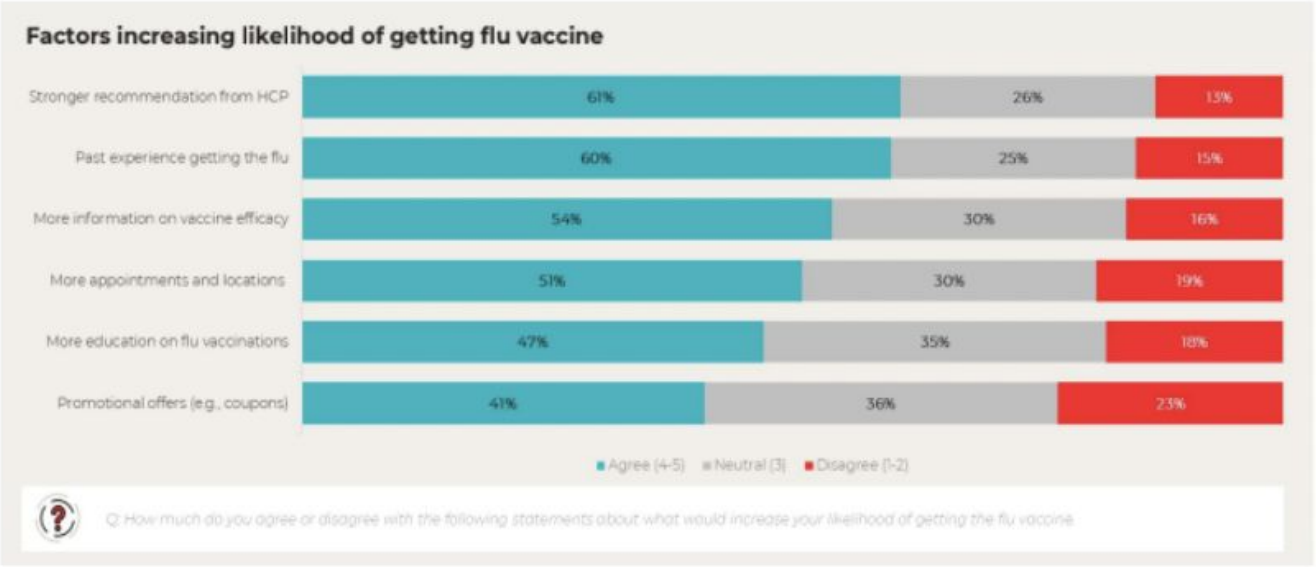
The Role of Healthcare Professionals

ADULTS

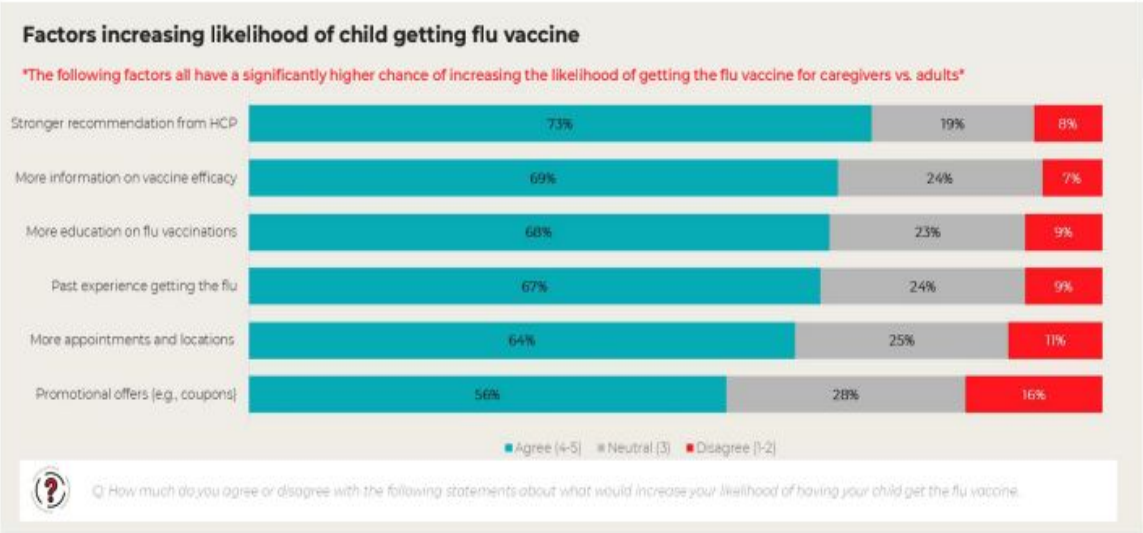
Having gotten the flu or stronger recommendations from the HCP are what adults feel will motivate them to receive the flu vaccine



The Role of Healthcare Professionals

CAREGIVERS

Stronger recommendations from the HCP and more information about vaccine efficacy motivate caregivers to have their child receive the flu vaccine



Trusted Resource - Always Educating

- **Always educate**
- **A story does resonate**
  [Families Fighting Flu - Family Stories]
- **Share your own story, or someone else's, either can make an impact**
- **Stories are 22x more memorable than statistics!**

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Motivational Interviewing

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Motivational Interviewing

- **Evidence-based** and **culturally sensitive** way to speak with unvaccinated patients about getting vaccinated
- The goal is to help people **manage mixed feelings** and move toward healthy behavior change consistent with their values and needs
- Ideal for situations for **concerned patients** or **patients with questions**
- Studies using MI with vaccination decisions demonstrate **increased intent to vaccinate** and **improved vaccination rates**

Motivational Interviewing Quickly Builds Trust and Partnership

- Four steps to applying rapidly (1-5 minutes)

1. Be empathetic
2. Ask permission
3. Apply interviewing techniques
4. Respond to questions

Step One

Step 1: Be an Empathetic Partner

- Be compassionate and **show empathy**.
- Be **sensitive** to culture, family dynamics, and circumstances that may influence how patients view vaccines.
- Do **not** argue or debate.

Step Two

Start by asking permission to discuss vaccines.

- **Start by asking permission to discuss vaccines.**

- **Example:**
  “If it is okay with you, I would like to spend a few minutes talking about vaccines and your family.”

Step Two

If the patient indicates they do NOT want to talk about vaccines:

- **Probe about why they don't want to talk about vaccines**
  - *"Can you tell me more about the reasons you don't want to discuss vaccination today?"*

- **Respect the patient's decision**
  - *"You're not ready to talk about vaccines today, and that's okay."*

- **Ask if they would be willing to talk about vaccines at their next visit**
  - *"Because I care about your overall health, maybe we could talk about the vaccine at your next visit?"*

Step Three

Apply Interviewing Techniques

- **Open the conversation**
  - Use open-ended starters to explore
  - Avoid yes/no questions, which stop the conversation
- **Affirm positive behaviors**
  - *“That’s great that you’ve gotten your flu vaccine. Now let's discuss some other vaccines.”*
- **Reflect what you hear**
  - *“It sounds like you have questions.”*
- **Summarize the conversation**
  - *“Let me see if I understand what you’ve said so far [summarize in your own words].”*

Step Three

- **Example: Ask the patient a scaled question.**
  - *“On a scale of 1 to 10, how likely are you to get a flu shot today?”*

- **Keep exploring and reflectively listen.**
  - *“Why did you choose this number?”*
  - *“Why wasn’t it lower?”*
  - *“Why wasn’t it higher?”*
  - *“What would take to get to a higher number?”*

The goal is to help the patient become more open to moving toward high numbers (i.e., getting vaccinated).

Step Four

Respond to Questions

- **If a patient asks a question about vaccine safety, vaccine risks, or their health or mental health, respond within the boundaries of your competence, ethics, and scope of practice.**
- **Most data on safety and risk is population based. Practice reframing safety as individual risk.**
  - *"Based on your health, you are at an increased risk of getting very sick, and in the group the vaccine will most benefit."*
- **If you do not know the answer to a question, discuss how to find a good source of information.**

Q&A

Contact Us

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Visit Families Fighting Flu to Learn More

FamiliesFightingFlu.org

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