

**Texas Department of State Health Services** 

# Respiratory Vaccine Administration and Coverage Data

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### DISCLAIMER

The information presented today is based on the CDCs and FDAs most recent guidance and MAY change.

Information listed in this presentation will cover ACIP recommended respiratory illness vaccines.

### **Presentation Agenda**

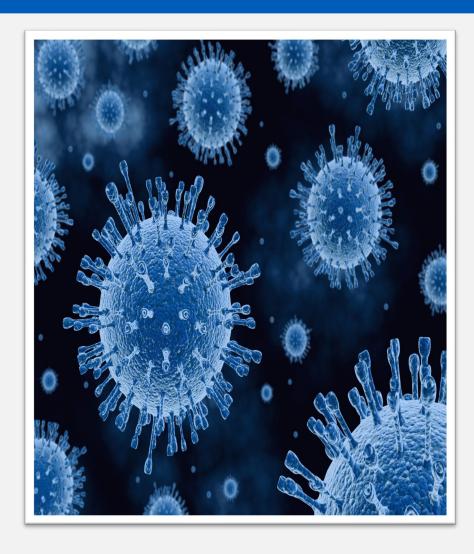
- Respiratory Vaccine Overview
  - Language of Respiratory Illnesses
  - Influenza
  - Respiratory Syncytial Virus (RSV)
  - COVID-19
- Respiratory Vaccination Coverage Data
  - Influenza Data
  - Respiratory Syncytial Virus (RSV) Data
  - COVID-19 Data



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# Respiratory Vaccine Overview

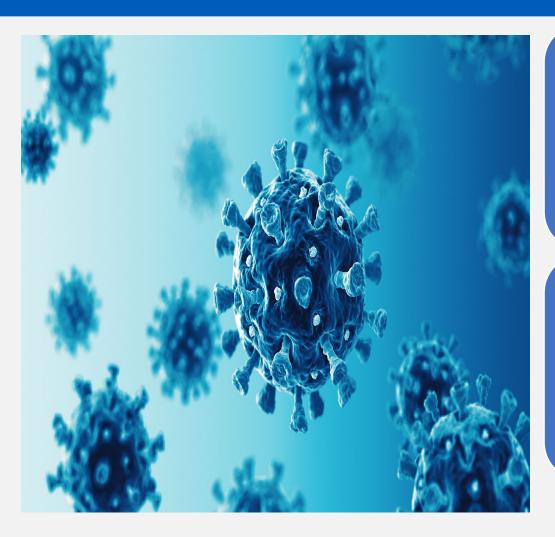
### Language of Respiratory Illnesses



Immunization: A process by which a person becomes protected against a disease through vaccination or the introduction to antibodies. For example, there is an RSV vaccine for long-term immunity and an RSV monoclonal antibody for short-term immunity

Vaccine: A preparation that is used to stimulate the body's immune response against diseases. Vaccines may be administered by injection, mouth or sprayed into the nose.

### Language of Respiratory Illnesses



Active immunity: The production of antibodies against a specific disease by the immune system. Active immunity can be acquired in two ways, either by contracting the disease or through vaccination. Active immunity is usually long-lasting, but individuals may remain susceptible to variants of the etiologic agent or to milder presentation of the disease.

<u>Passive immunity:</u> Protection against disease through antibodies produced by another human being or animal. Passive immunity is effective, but protection is generally limited and diminishes over time (usually a few weeks or months). For example, maternal antibodies are passed to the infant prior to birth and protect the baby for the first 4–6 months of life.

### **Respiratory Illness Season**

 Historically, Influenza, RSV, and COVID-19 all share a "season." They begin to show seasonal disease onset between mid-September and early October, with season "peak" from December to February. What we used to commonly call "Flu Season" has recently become "Respiratory Illness Season."



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### Flu Vaccines – 2024-25 Season

Manufacturer	Brand Name	Vaccine Strains	Presentations	Ages		
GSK	Fluarix	Trivalent	0.5mL Single Dose (Syringe)	6 months+		
GSK	Flulaval	Trivalent	0.5mL Single Dose (Syringe)	6 months+		
Sanofi	Fluzone Trivalent		5mL Multi Dose (Vial),	6 months+		
			0.5mL Single Dose (Syringe)			
Seqirus USA, Inc	Flucelvax	Trivalent	5mL Multi Dose (Vial) 6 months+			
			0.5mL Single Dose (Syringe)			
Seqirus USA, Inc	Afluria	Trivalent	5mL Multi Dose (Vial)	6 months+		
			0.5mL Single Dose (Syringe)	36 months+		
AstraZeneca	FluMist	Trivalent	0.2mL Spray	2 years+		

- There are two injectable monoclonal antibody products that help protect infants and young children aged 0-19 months from lower respiratory tract infection caused by RSV.
  - Nirsevimab (Beyfortus)
  - Palivizumab (Synagis)
- There are three RSV vaccines approved for use in the United States for people aged 60 years and older:
  - Abrysvo (Pfizer), Arexvy (GSK), and mRESVIA (Moderna)
- There is one RSV vaccine, Abrysvo (Pfizer), recommended for pregnant women to prevent severe RSV lower respiratory tract infection in their infants.

#### **Recommendations for Using Nirsevimab**

- One dose is recommended for infants younger than 8 months old who were born shortly before or are entering their first RSV season, if:
  - The mother did not receive RSV vaccine during pregnancy.
  - The mother's RSV vaccination status is unknown.
  - The infant was born within 14 days of maternal RSV vaccination.
- A dose is recommended for some children aged 8 through 19 months old who are at increased risk for severe RSV disease and are entering their second RSV season. This includes:
  - American Indian/Alaska Native children
  - Children with chronic lung disease of prematurity who require medical support during the six months before the start of their second RSV season
  - Children that are severely immunocompromised
  - Children with severe cystic fibrosis
- Children 8 months and older who are not at increased risk of severe RSV disease should not receive Nirsevimab.

#### Recommendations for Using Abrysvo, Arexvy and mRESVIA (Older Adults)

- There are three RSV vaccines approved for use in the United States for people aged 60 years and older: Pfizer RSV vaccine (ABRYSVO), GSK RSV vaccine (AREXVY), and Moderna RSV vaccine (mRESVIA).
- These vaccines protect older adults against respiratory disease if they are infected with RSV in the future.
- CDC recommends that people aged 60-74 years with increased risk of severe RSV and everyone aged 75 years and older receive a single dose of an RSV vaccine.
- RSV vaccines may be given at the same time as other vaccines for older adults.

#### **Recommendations for Using Abrysvo (Pregnant Women)**

- Pfizer's RSV vaccine, ABRYSVO, is the only RSV vaccine approved and recommended for use in pregnant women to prevent severe RSV illness in their babies.
  - A single dose is recommended for those who are 32 through 36 weeks pregnant during September through January in most of the continental United States.
  - Some areas of the world will have adjustments due to disease prevalence and seasonality.
  - The Pfizer RSV maternal vaccine may be given at the same time as other routine vaccines for pregnant women.
  - The GSK RSV vaccine (AREXVY) and the Moderna RSV vaccine (mRESVIA) are NOT recommended for pregnant women.

### COVID-19-Vaccines 2024-2025 Season

Manufacturer	Туре	Ages
Moderna	mRNA	12-18+ Years
Moderna	mRNA	6 Months – 11 Years
Pfizer/BioNTech	mRNA	12-18+ Years
Pfizer/BioNTech	mRNA	5 Years -11 Years
Pfizer/BioNTech	mRNA	6 Months – 4 Years
NovoVax	Protein Subunit Vaccine	12-18+ Years

# Respiratory Vaccine Coverage Data

## Influenza Vaccine Coverage



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### Flu Vaccination Coverage Estimates by Age Groups from the 2021-22 Season to the 2022-23 Season for Texas

Age Groups	Texas 2021-22 Season	Texas 2022-23 Season	TX Percentage Point Difference
6 months – 4 years	68.7%	63.9%	-4.8%
5-12 years	55.0%	59.8%	<b>4.8</b> % <sup>a</sup>
13-17 years	51.0%	47.3%	-3.7%
18+ years	43.0%	38.6%	-4.4% <sup>a</sup>
18-49 years	31.9%	28.6%	-3.3%
50-64 years	47.3%	45.0%	-2.3%
65+ years	71.5%	62.4%	-9.1% <sup>a</sup>

Significantly different (p<0.05) in 2022-23 Season compared to 2021-22 Season.

<sup>\*</sup>This data comes from the National Immunization Survey – Flu (NIS-Flu) which uses self-reported survey data to estimate flu vaccine coverage nationwide each year.

### Total TVFC Vaccine Doses Ordered and Shipped, 2022-23 and 2023-24 Seasons, per the Vaccine Allocation and Ordering System(VAOS)

Season	Total Ordered	Total Received	Total Shipped	% of Received Doses Shipped
Current Season	1,711,170	1,711,140	1,251,290	73.13%
Last Season	1,710,020	1,709,820	1,271,570	74.37%

# 2023-24 TVFC Flu Vaccines Ordered by Texas PHR's

		oses Received Region		Open Or	dering	Total Doses by Reg	
Region	Doses Pre- booked by Region*	Total Pre-book Doses Shipped	% Pre-book Doses Shipped	Total Doses Shipped During Open Ordering (Oct 30 <sup>th</sup> – May 31 <sup>st</sup> )	% Doses Shipped During Open Ordering	Total Pediatric Doses Shipped	% Total Pediatric Doses Shipped
PHR 1	34,160	24,850	73%	2,460	9%	27,310	80%
PHR 2	14,740	13,470	91%	740	5%	14,210	96%
PHR 3	294,360	240,580	82%	35,960	13%	276,540	94%
PHR 4	38,580	39,090	100%	1,180	3%	40,270	100%
PHR 5	23,170	20,540	89%	1,760	8%	22,300	96%
PHR 6	411,100	295,020	72%	43,840	13%	338,860	82%
PHR 7	125,370	102,360	82%	16,220	14%	118,580	95%
PHR 8	144,770	118,570	82%	16,910	12%	135,480	94%
PHR 9	26,430	24,040	91%	1,420	6%	25,460	96%
PHR 10	80,110	66,710	83%	4,980	7%	71,690	89%
PHR 11	191,360	153,150	80%	27,600	15%	180,750	94%
Total*	1,384,150	1,098,380	79%	153,070	12%	1,251,450	90%

<sup>\*</sup>Data as of October 23<sup>rd</sup>, 2023

### ImmTrac2 Flu Vaccine Doses Administered by Age Groups, 2022-23 – 2023-24 Seasons

Age Group	Current Season Doses Reported to Date	Previous Season Doses Reported to Date	Difference in Doses Reported
6M-4 Years	560,216	570,378	-10,162
5-12 Years	591,540	621,110	-29,570
13-17 Years	314,618	273,351	41,267
18-64 Years	1,429,656	1,428,562	1,094
65+ Years	1,054,176	922,685	131,491
Total	3,950,206	3,816,086	132,950

Data as of July 29<sup>th</sup>, 2024

### ImmTrac2 Flu Vaccine Doses Administered by Public Health Region, 2022-23 – 2023-24 Seasons

Region	Current Season Doses Reported to I Date	Previous Season Doses Reported to Date
PHR 1	74,199	81,262
PHR 2	54,497	53,449
PHR 3	1,001,408	957,884
PHR 4	139,868	135,207
PHR 5	59,425	56,329
PHR 6	1,042,951	1,016,041
PHR 7	579,490	557,623
PHR 8	442,710	430,465
PHR 9	55,354	47,194
PHR 10	124,403	116,716
PHR 11	301,482	290,254
Total	3,875,787	3,742,424
f July 29th, 2024		

# **RSV Vaccine Coverage**



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# RSV Vaccines Administered by Age Group, 2023-24 Season, per ImmTrac2

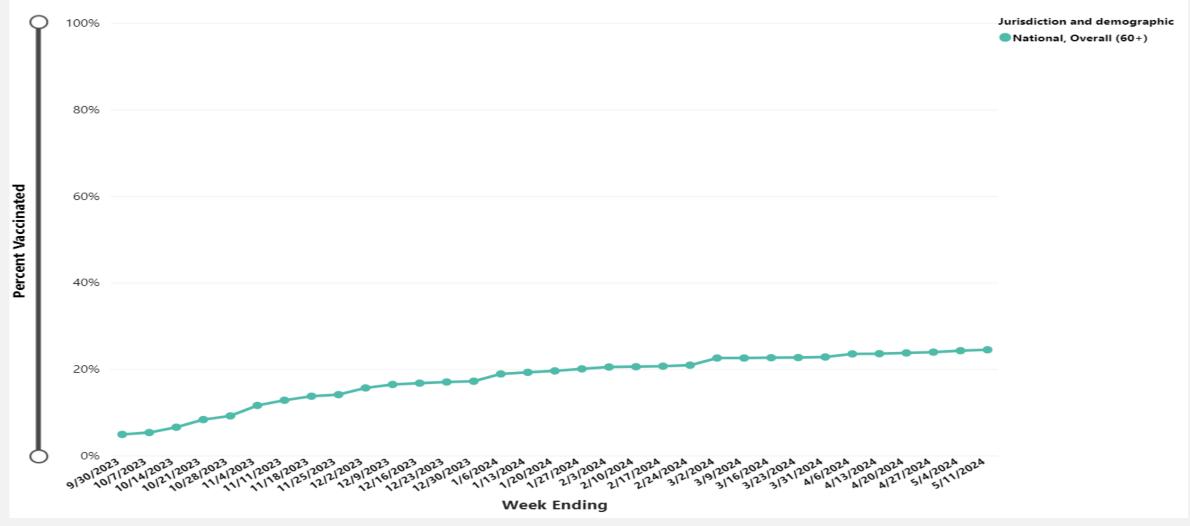
Age Group	Population Estimate	Total Vaccines Administered	Percent Vaccinated
0-8 Months	279,150	41,629	14.91%
9-18 Months	388,152	7,397	1.91%

# RSV Vaccines Doses Ordered, 2023-2024 Season, per Texas Vaccines for Children (TVFC)

	Sep-		Nov-			Feb-		Apr-	May-	Jun-	Jul-	Aug-	Grand
Vaccine Family	23	Oct-23	23	Dec-23	Jan-24	24	Mar-24	24	24	24	24	24	Total
RSV													
(Adult/Maternal)	-	-	-	194	142	-	-	-	-	-	-	-	336
Abrysvo	-	-	-	194	142	-	-	-	-	-	_	-	336

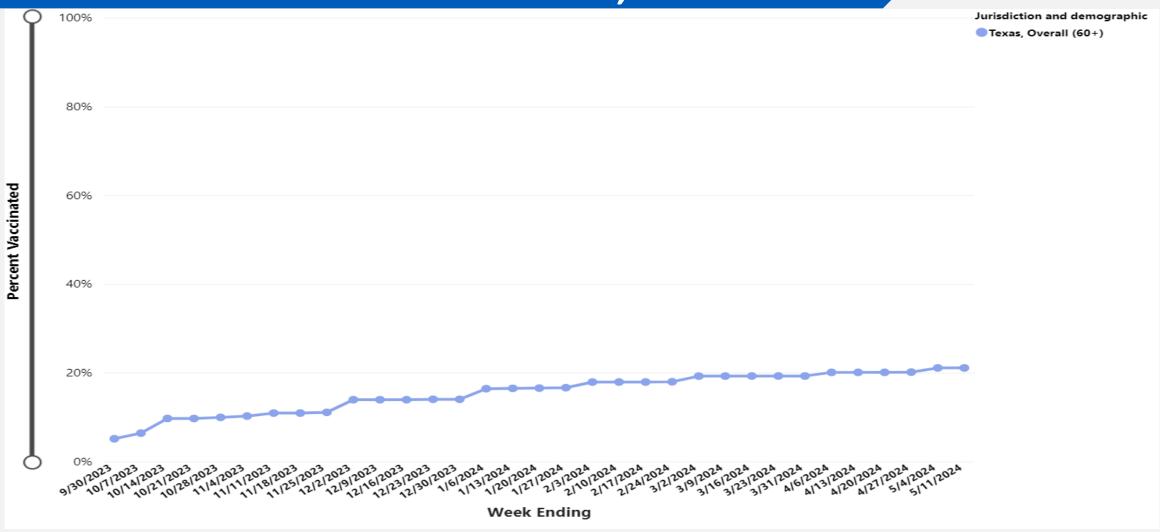
Vaccine Family	Sep-23Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May- 24		Jul- 24	Aug- 24	Grand Total
RSV (Pediatric) Tota	l - 39,825	16,260	17,030	10,925	3,735	4,580	-	-	-	-	-	92,355
Beyfortus 100mg	- 20,270	490	7,165	6,575	1,015	690	-	-	-	-	-	36,205
Beyfortus 50mg	- 19,555	15,770	9,865	4,350	2,720	3,890	-	-	-	_	-	56,150

### National Cumulative Percentage of Adults 60+ Vaccinated with an RSV Vaccine, 2023-2024



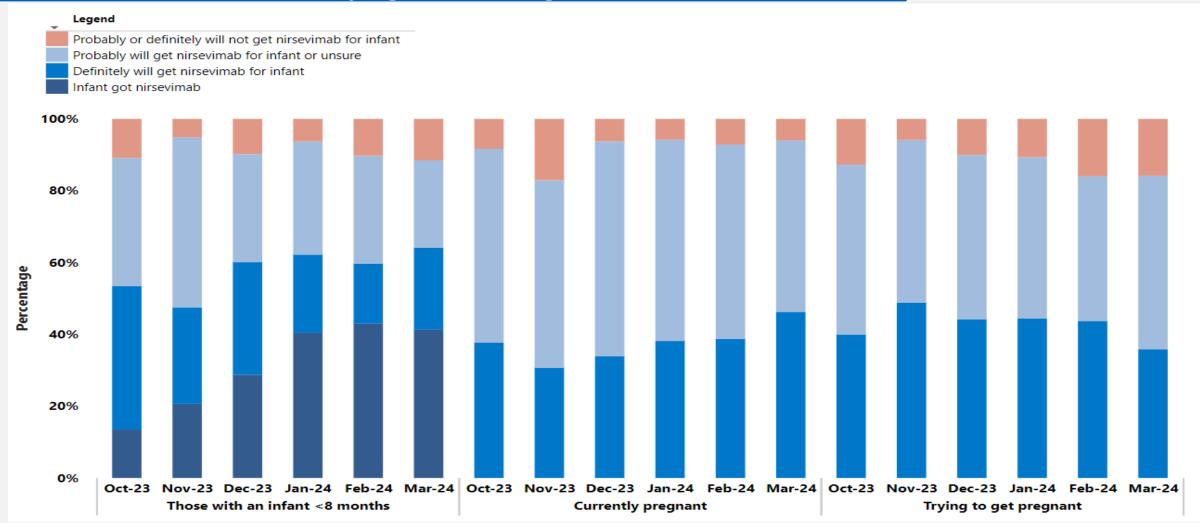
Source: NIS- Adult COVID Module

# Texas Cumulative Percentage of Adults 60+ Vaccinated with an RSV Vaccine, 2023-2024



Source: NIS- Adult COVID Module

# National Monthly Nirsevimab Receipt and Intent Among Females 18-49 Who Have An Infant <8Months, Are Currently Pregnant, or Are Trying to Get Pregnant



Source: NIS- Adult COVID Module

# **COVID-19 Vaccine Coverage**



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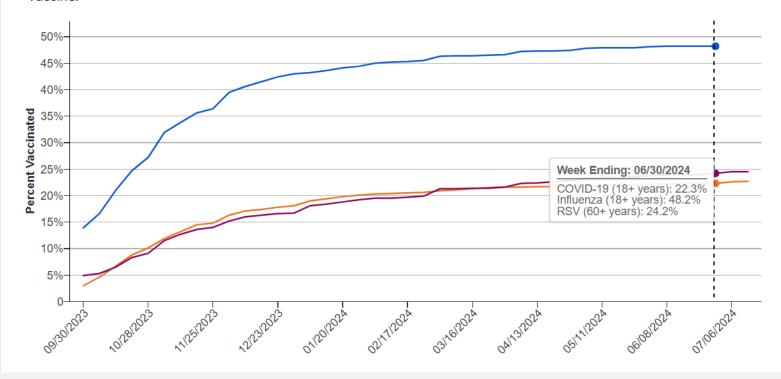
# COVID-19 Vaccines Doses Ordered, 2023-2024 Season, TVFC and Adult Safety Net (ASN)

Vaccine Family	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul- 24	Aug- 24	Grand Total
COVID (Adult)	17,160	12,750	9,380	5,770	4,340	2,770	3,500	4,180	3,540	2,110	2,100	180	67,780
COVID (Child)	42,670	63,050	39,580	31,220	23,330	18,840	19,810	20,260	16,270	13,980	9,150	410	298,570

# Nationwide Respiratory Vaccine Coverage - Adults

### Weekly Cumulative Percent Vaccinated in the United States

Cumulative percent of adults vaccinated with COVID-19 (18+ years), influenza (18+ years), or RSV (60+ years) vaccine.



#### Legend:

COVID-19 – Orange

Influenza – Blue

**RSV** - Red

#### **Resources:**

<u>Texas Vaccines for Children Program - Immunizations Unit</u>

<u>Immunization Unit (texas.gov)</u>

https://www.dshs.texas.gov/immunize/school/default.shtm

Recommended Immunization Schedules for Children and Adults (texas.gov)

ImmTrac2, the Texas Immunization Registry

<u>Information for Healthcare Providers - Immunization Unit (texas.gov)</u>

<u>Influenza (Flu) Vaccine Information - Where to Get Immunized (texas.gov)</u>

The TVFC/ASN Digest (texas.gov)

<u>Information on Infant Immunizations (texas.gov)</u>

<u>Preteen Vaccines (texas.gov)</u>

Adult & Adolescent Immunization Program (texas.gov)

Texas Perinatal Hepatitis B Prevention Program

#### **Resources:**

VFC: Vaccines for Children Program | CDC

Vaccines and Immunizations | CDC

Vaccines and Immunizations: For Healthcare Professionals | CDC

Vaccine Education and Training for Healthcare Professionals | CDC

Vaccines Pink Book Webinar Series | CDC

Talking to Parents about Vaccines Materials | Conversations | CDC

<u>Understanding Vaccines and Vaccine Safety | Conversations | CDC</u>

About the Vaccine Conversations with Parents Campaign | CDC

Foster Support for Vaccination in Your Practice | CDC

ACIP Timing and Spacing Guidelines for Immunization | CDC

National Vaccine Finder

**Public Health Regions** 

### Resources:

https://dshs.texas.gov/coronavirus/therapeutics/

COVID-19 Therapeutics | HHS/ASPR

https://covid-19-therapeutics-locator-dhhs.hub.arcgis.com/

State/Territory-Coordinated Distribution of COVID-19 Therapeutics (hhs.gov)

https://covid.cdc.gov/covid-data-tracker/

# Thank you!