U.S. Centers for Disease Control and Prevention National Center for Immunization and Respiratory Diseases



Trusted Messengers, Routine Immunization, and Outbreak Response

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The opinions expressed are the author's own and do not necessarily reflect the views of the Centers for Disease Control and Prevention, the Department of Health and Human Services, or the United States government. Dr. Daskalakis has no financial disclosures or conflicts of interest.

The Power of Trusted Messengers

- CDC and its National Center for Immunization and Respiratory Diseases (NCIRD) couldn't do the work without trusted messengers like you.
- The trusted messenger role provides great value.
- You are leaders of state, local, and territorial immunization programs, leading public health efforts to keep children and adults vaccinated.
- You save lives every day.



The Flips



Everyday Public Health

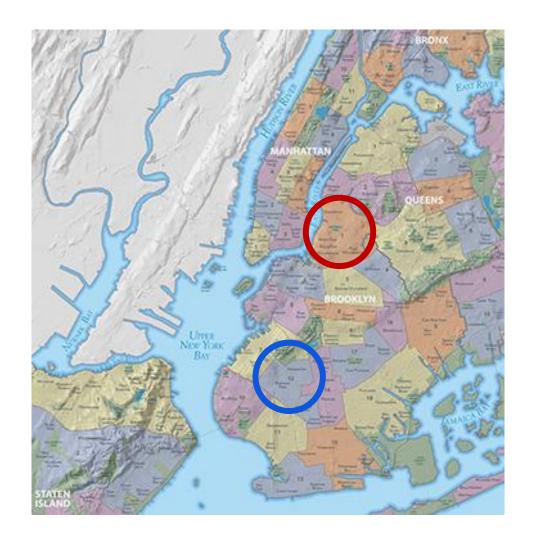
Outbreak Response

NYC Measles Outbreak 2018-2019

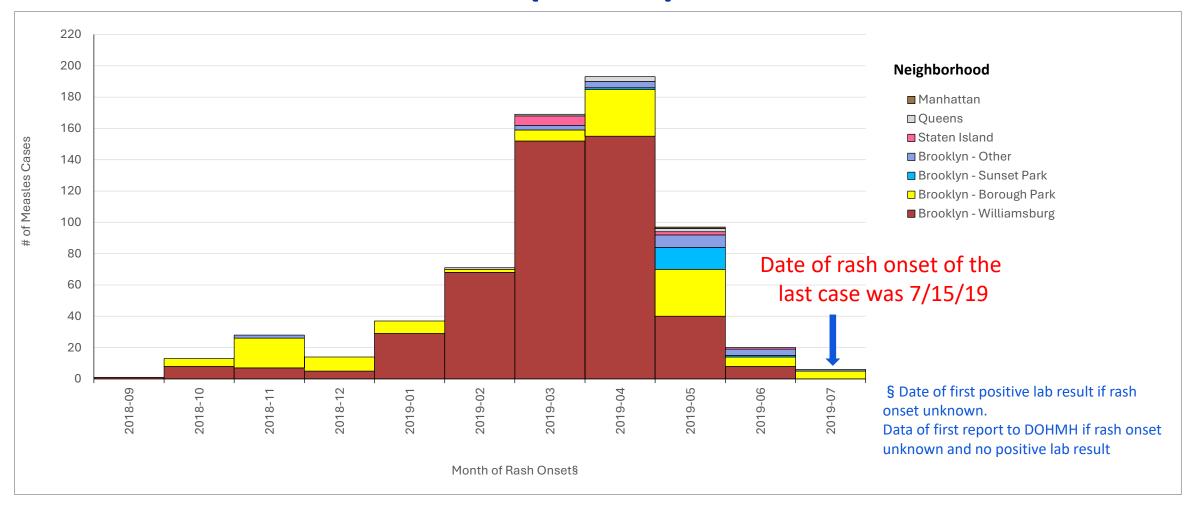


2018-2019 Measles Outbreak

- Concentrated in the ultra-Orthodox Jewish neighborhoods in Williamsburg and Borough Park, Brooklyn
- First case: unvaccinated child who had returned from Israel, rash onset was 09/30/2018

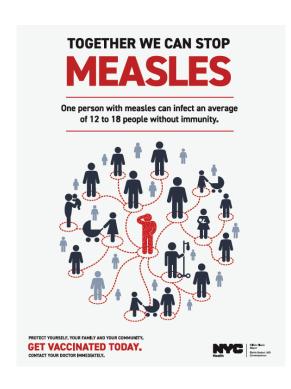


Measles Cases by Date of Rash and Neighborhood (n=649)



Source: NYC DOHMH surveillance data, as of 9/25/19

Countering Misinformation





IF YOU HAVE

fever, cough, red eyes, runny nose and body rash,







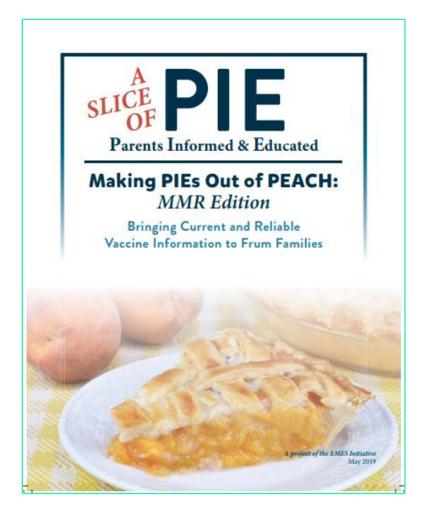








Countering Misinformation



VACCINE SAFETY

How Do I Know Vaccines Are Safe?

Just like all drugs, vaccines undergo a lot of scrutiny before being approved. It takes many years, from the application process, all the way through all the stages of testing, to receive approval for use on humans. Once a vaccine is approved, that is not the end of the monitoring. Several organizations oversee the manufacturing, and continually gather information on all vaccines to ensure safety and effectiveness.

Here are some organizations that monitor vaccine safety:

The following organizations monitor vaccine safety: the Food and Drug Administration, Centers for Disease Control and Prevention, National Institutes of Health, and the Department of Defense, among others. There are surveillance systems to identify vaccine safety concerns, including: Vaccine Adverse Event Reporting System (VAERS), Vaccine Safety Datalink (VSD), Post-Licensure Rapid Immunization Safety Monitoring (PRISM), and the Clinical Immunization Safety Assessment (CISA) Project.

Anti-Vaxx Myth: There are no safety studies or any real way to know if vaccines are safe.

PIE: False. Vaccines are studied and monitored from the very beginning and go through years of safety testing in labs and clinical trials before they go to market. Once the vaccine is approved, the manufacturer tests batches of the vaccine for quality and safety before the FDA can recommend it for use. Once the vaccine goes to market, multiple agencies monitor its safety and provide additional checks. Source: HHS, 2017b

Anti-Vaxx Myth: "It is rare for a vaccine to be removed from circulation, no matter how much damage it is causing."

PIE: False. As with any drug, not all adverse effects will occur during clinical trials. Therefore, once a vaccine is made available to the public, information is continually gathered to identify problems after marketing begins. Although vaccines rarely cause long-term harm, there have been a few cases where a specific vaccine was found to be unsafe once they were already in use. In these cases, the vaccine was immediately removed from circulation.

Source: HHS, 2017b; Offit, 2005; CDC, 2015

Is there any connection between autism and vaccines?

In 1998, a study by Andrew Wakefield, then a consultant gastroenterologist, was published in the Lancet, a British medical journal. He studied 12 children whose parents claimed they noticed behavioral regression and gastrointestinal symptoms after their children received the MMR vaccine. After publishing his study, Wakefield then held a press conference where he stated that the MMR vaccine was unsafe, and advocated the use of single-antigen vaccines (i.e., separating the measles, mumps, and rubella into three separate vaccines). Source: Dyer 2010; Wakefield, 1998

Wakefield's study, however, never concluded that MMR caused either autism or the gastro-intestinal problems. To the contrary, Wakefield actually made the following statement in his study: "We did not prove an association between measles, mumps, and rubella vaccine and the syndrome described." He also concluded that, "A genetic predisposition to autistic-spectrum disorders is suggested by over-representation in boys and a greater concordance rate in monozygotic [identical] than in dizygotic [fraternal/non-identical] twins." Source: Dyer 2010; Wakefield, 1998

Response to Misinformation

- Met with rabbinical and community leaders, elected officials
- Partnered with Jewish Orthodox Women's Medical Association and Vaccine Task Force on outreach
- Attended community health fairs

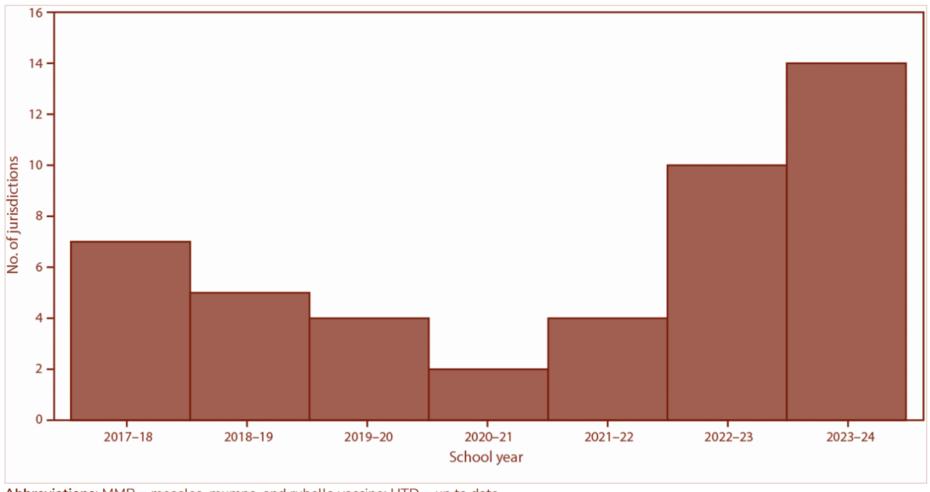




Measles (Part 2)

Childhood Vaccination Coverage is Declining

FIGURE 2. Number of jurisdictions that could not potentially achieve ≥95% coverage*,† with measles, mumps, and rubella vaccine among kindergartners — United States, 2017–18 to 2023–24 school years



Abbreviations: MMR = measles, mumps, and rubella vaccine; UTD = up to date.

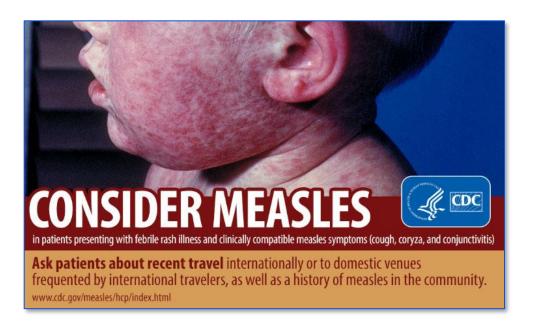
Measles in the United States Today

Increase in Global and Domestic Measles
Cases and Outbreaks: Ensure Children in the
United States and Those Traveling
Internationally 6 Months and Older are Current
on MMR Vaccination









As of **November 21**, this year:

- A total of 280 measles cases have been reported by 32 jurisdictions
 - There have been 16 measles outbreaks
 - 70% of cases are outbreak-related
- Measles is almost entirely preventable by vaccination
- Vaccination coverage decreases have increased the risk of outbreaks

FOCUS: Fostering Overall Community Understanding & Support

Earlier this year, CDC launched FOCUS to better support states and cities in addressing outbreaks.

FOCUS aims to increase vaccination rates among close-knit communities that have:

- Experienced recent vaccine-preventable disease outbreaks
- Consistently lower childhood vaccination rates for 1+ vaccines
- No significant improvement in vaccination coverage

Association of Immunization Managers (AIM)'s Role:

- Helped distribute the 2024 Measles Situational Awareness Survey to all 64 jurisdictions
- The survey identified barriers, promising practices, and jurisdictions interested in joining a learning collaborative



CDC "FOCUSed" on Measles













The Flips



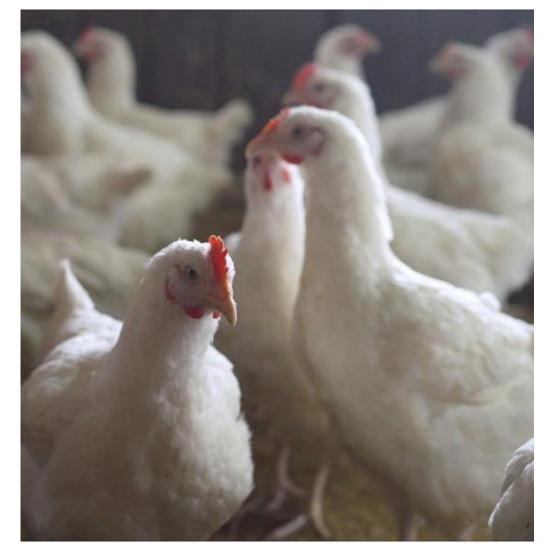
Routine Immunization

Outbreak Response

H5N1

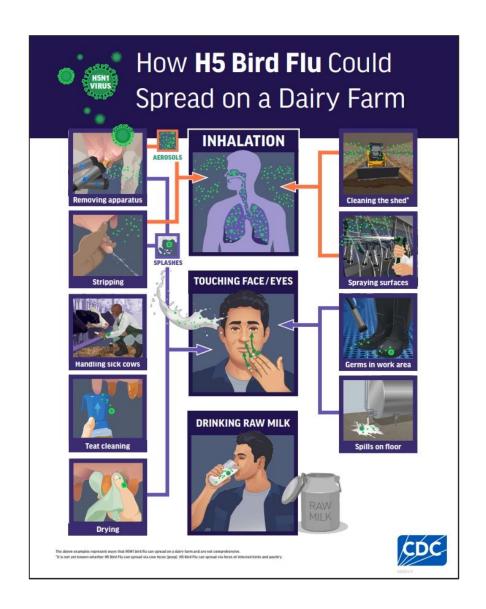
Highly Pathogenic Avian Influenza (HPAI)

- Influenza A(H5N1) "bird flu" is widespread in wild birds worldwide
 - Outbreaks among commercial poultry, backyard bird flocks, wild terrestrial and marine mammals, and domesticated animals occur regularly.



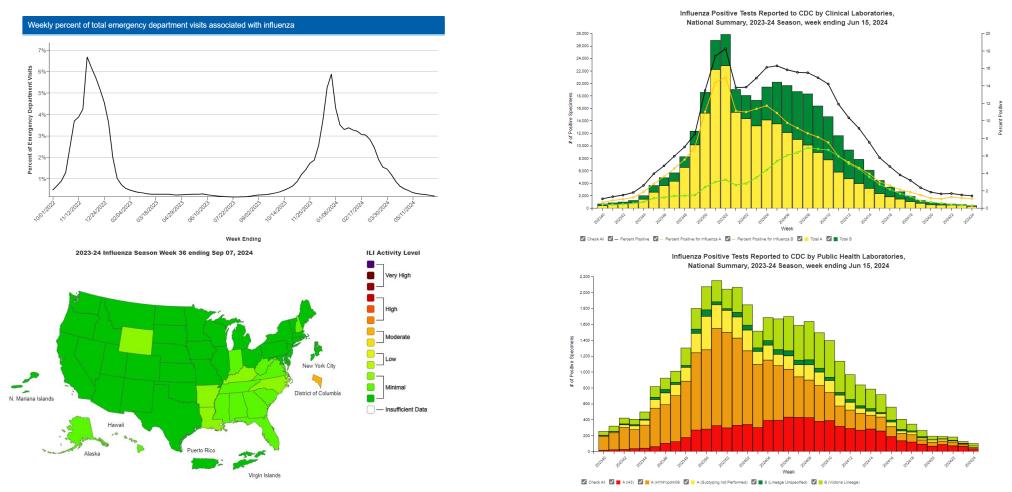
Human Exposures to HPAI A(H5N1) Viruses

- Human infections have been the result of:
 - Poultry exposures
 - Direct/close contact with sick or dead poultry
 - Visiting a live poultry market
 - Exposure to other infected animals
 - Direct contact or close exposure (swans, dairy cows)
 - Limited, non-sustained human-tohuman transmission has occurred in other countries

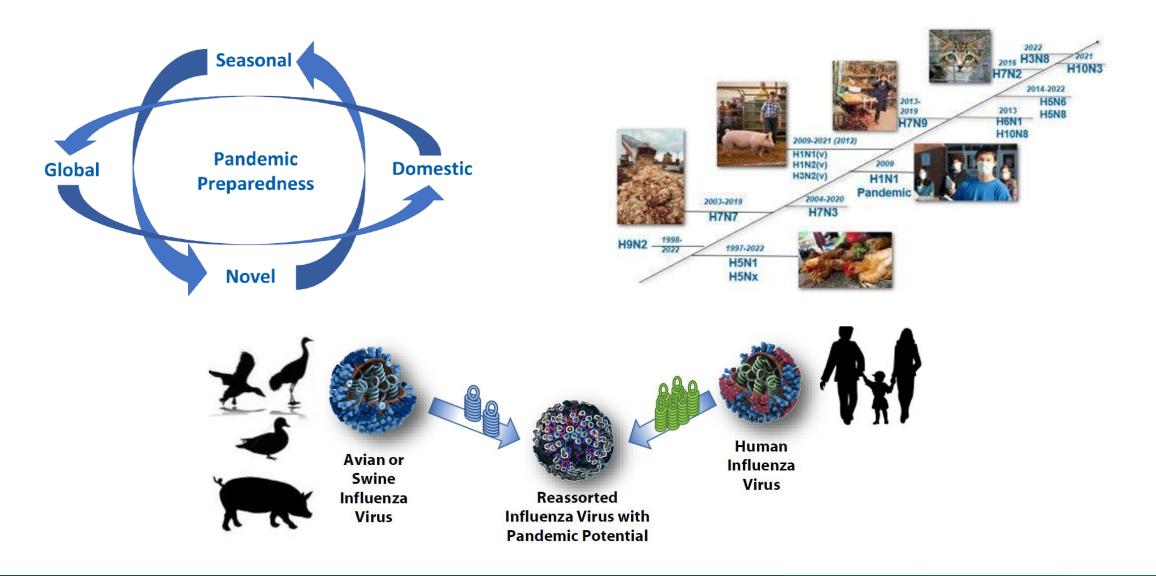


Surveillance, Human Monitoring, and Testing

Since February 2024, public health laboratory monitoring includes testing of more than **61,000+ specimens** using a protocol that would have detected H5



Seasonal Preparedness is Pandemic Preparedness

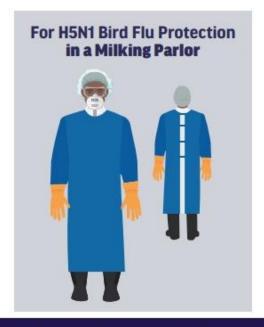


Public Health Risk

- Overall risk to the public remains low
- Greater risk for people with exposures to infected animals, or to environments contaminated by infected animals, in particular farmworkers
- Exposed individuals should monitor for symptoms after first exposure and for 10 days after last exposure

Highly Pathogenic Avian Influenza A(H5N1) Virus in Animals: Interim Recommendations for Prevention, Monitoring, and Public Health Investigations | Avian Influenza (Flu) (cdc.gov)





The milking parlor option is for limited settings, where the source of contamination is only from one side. Talk to your supervisor to know if this applies to you.

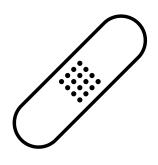
<u>Avian Influenza Social Media Toolkit | Bird Flu | CDC</u>

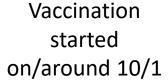
Michigan-Colorado Dairy Worker Serosurvey

- A majority of interviews were conducted in Spanish
- Most workers had multiple roles on the farm
- While all people worked on confirmed dairies, not all workers self-reported they had close contact with cows that had bird flu

Characteristic	Overall, N = 115
Spanish-language survey	83 (72%)
Days since first exposure	49 (47–59) days
Seasonal flu vaccination	21 (18%)
Job tasks after cows became sick	
Total number	5.0 (2.0-7.5)
Milking cows	68 (59%)
Cleaning the milking parlor	49 (43%)
Self-report contact with bird flu cows	68 (64%)

Seasonal influenza vaccination programs for farmworkers







Jurisdictional support from ISD Project Officers



Project Officers inquiring about any issues and info for comms campaign



Webinar for the 12 participating jurisdictions w/ NCFH, EXCITE, and others



Initial data submission 11/9

Investments to Protect Farmworker Health

- \$5 million to partner organizations, including the National Center for Farmworker Health and NIOSH Centers for Agricultural Health and Safety
 - Support overall outreach and education efforts focused on farmworker safety and health through key activities including:
 - Developing relevant communication materials
 - Leveraging a network of community-based organizations
 - Facilitating listening sessions with dairy workers and CDC SMEs to better understand needs
 - Collecting data from farmworkers to better understand barriers
- \$5 million to offer seasonal flu vaccines to U.S. livestock, dairy, and poultry workers to control and prevent seasonal flu among this group
 - CDC is developing an outreach strategy to raise awareness

Community Engagement



At-risk communities



Populations often missed by public health



Public Health Agencies



Partnerships



At the National Center for Farmworker Health's Agricultural Worker Health Symposia last week

The Flips

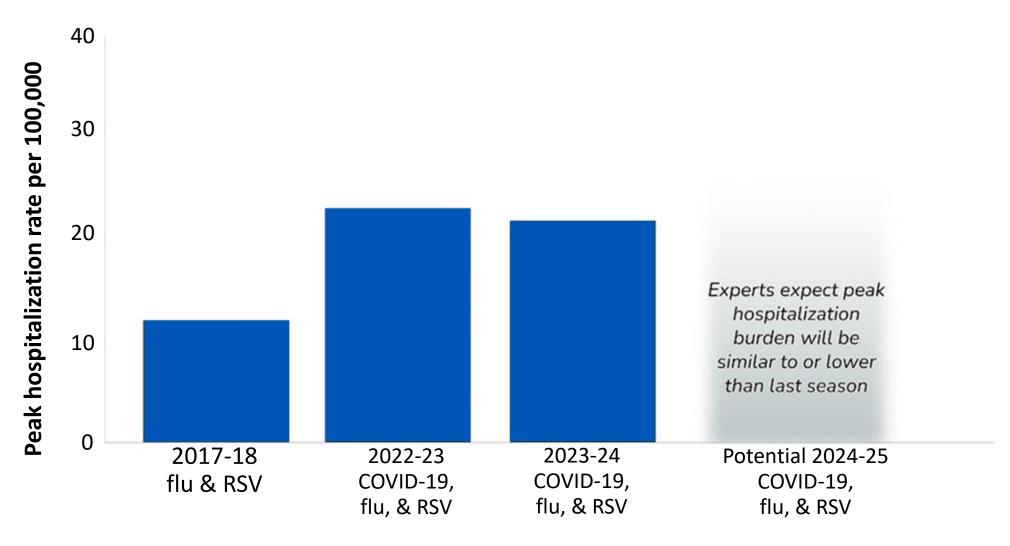


Seasonal Preparedness

Novel Flu Preparedness



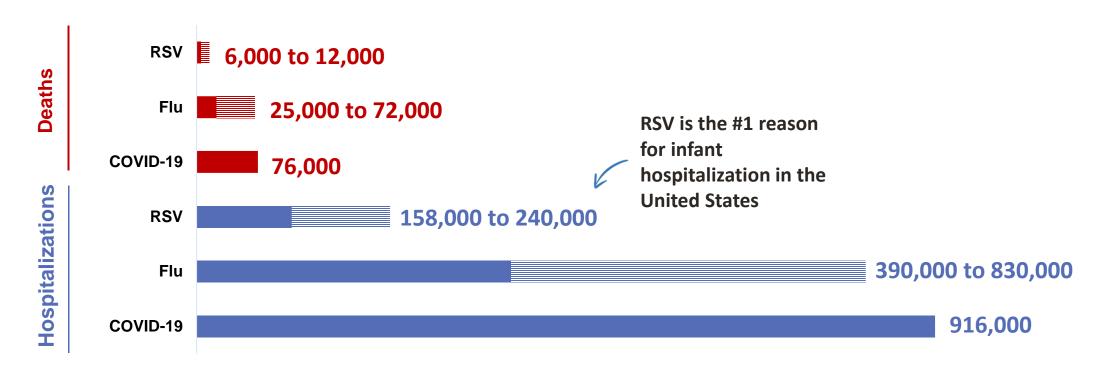
Now with COVID-19, even a moderate fall and winter virus season can be worse than a severe pre-pandemic season



2024-2025 Respiratory Disease Season Outlook, CDC.gov

Respiratory viruses remain important public health threats

Last season, over 1 million Americans were hospitalized and over 100,000 died



^{*}Shaded bars represent high and low estimates for RSV and Flu deaths and hospitalizations. COVID-19 deaths and hospitalizations are those reported and not estimates.

CDC Recommends Updated 2024-2025 COVID-19 and Flu Vaccines for Fall/Winter Virus Season, Preliminary Estimated Flu Disease Burden 2023-2024 Flu Season,

Surveillance of RSV

29



Fall and Winter Immunization Guide

COVID-19 and Flu **Updated 2024-25 Vaccines**

Everyone 6 months and older



RSV Immunization to Protect Babies

Vaccine

Pregnant parents during weeks 32-36 of pregnancy during RSV season

OR

Monoclonal Antibodies **Babies** entering or born during the RSV season

cdc.gov/respiratory-viruses/prevention/immunizations.html

RSV Vaccine for Older Adults

(currently, older adults only need to get the RSV vaccine once; not annually)

People ages 60 and over at high risk of severe RSV

AND

Everyone ages 75 and older



COVID-19 and influenza vaccination coverage and intent among adults ≥18 and ≥75 years by end of November 2024 compared with 2023, NIS-ACM

Probably will get

a vaccine/unsure

Definitely will

get a vaccine

Influenza (18+ years)

- Coverage plus definite intent:
 - 11/25/2023: 50.3
 - 11/23/2024: 49.1
- Final coverage 2023-24: 48.1%

Influenza (75+ years)

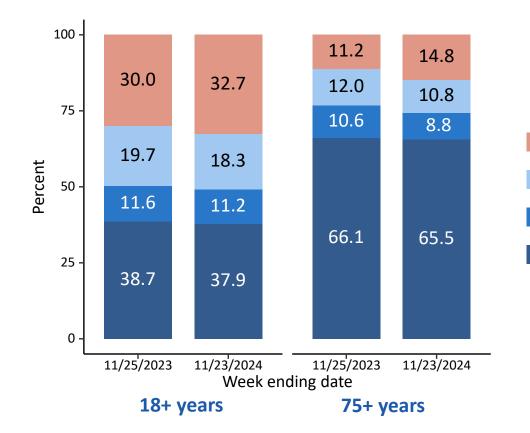
- Coverage plus definite intent:
 - 11/25/2023: 76.8
 - 11/23/2024: 74.3
- Final coverage 2023-24: 76.3%

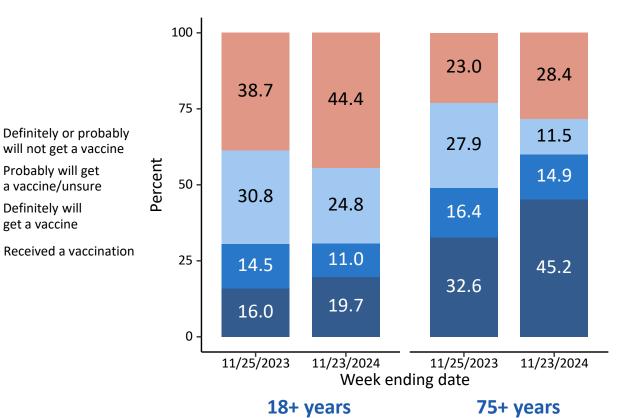
COVID-19 (18+ years)

- Coverage plus definite intent:
 - 11/25/2023: 30.5
 - 11/23/2024: 30.8
- Final coverage 2023-24: 22.9%
 Final coverage 2023-24: 41.1%

COVID-19 (75+ years)

- Coverage plus definite intent:
 - 11/25/2023: 49.0
 - 11/23/2024: 60.1





The Flips



Seasonal Preparedness

Outbreak Preparedness

Thank You for Your Dedication

Immunization Program Managers and Staff:

Your dedication to public health is truly appreciated.

Your work is essential year-round, especially as we face:

- Anxiety surrounding upcoming grant awards
- The ongoing challenge of data modernization
- Addressing vaccine hesitancy
- Fatigue from the COVID years



Celebrating 25 Years of Success!

We've made tremendous progress over the past 25 years, and together, we will continue to protect public health.

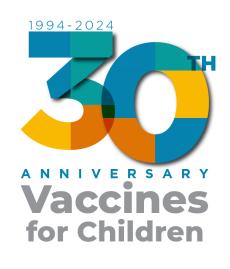
A Quarter Century of Immunization Successes:

- ✓ Strengthening public health programs
- ✓ Increasing vaccination rates
- ✓ Protecting communities through collaborative efforts



30 Years of Protecting Children: VFC Program

Since 1994, VFC has ensured all children have access to lifesaving vaccines.



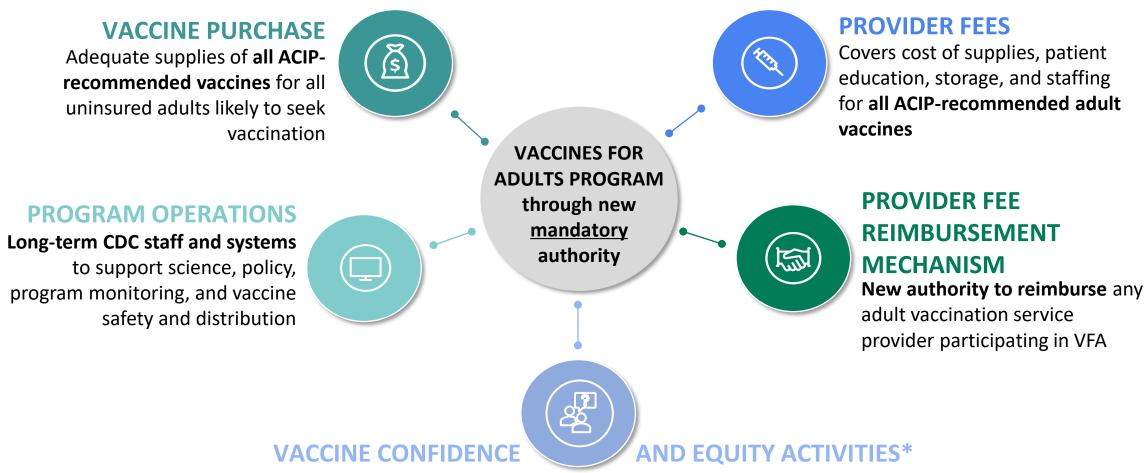
Impact: Vaccinations for children born between 1994–2023 will prevent about 508 million illnesses and save over 1.1 million lives.

Challenges and Focus:

- Reach more children without health insurance and those living at or below the poverty level.
- From the 2019-20 to 2022-23 school year, kindergarten coverage dropped from 95% to 93%.
- In the 2023-24 school year, coverage declined further to <93% for all reported vaccines.

Learn more at: <u>Vaccines for Children (VFC) Program 30 Years of Protecting Children</u>

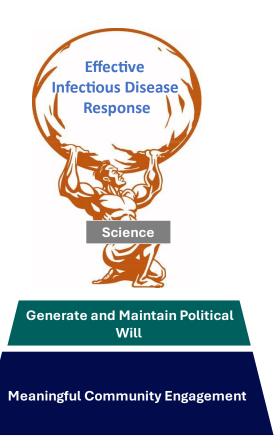
The proposed Vaccines for Adults program would reduce the spread of vaccine-preventable diseases and pave the way to greater health equity



Long-term, reliable CDC funding and support for vaccine equity through partnerships, communications, and technical assistance

^{*}These activities are funded in the FY24 CDC Budget with base immunization funding, not the newly proposed mandatory funding proposal that would support the rest of these activities.

Key Takeaways







Everyday Public Health

Outbreak Response

Thank you!

For more information, contact CDC 1-800-CDC-INFO (232-4636) TTY: 1-888-232-6348 cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the U. S. Centers for Disease Control and Prevention.

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