RSV Vaccination in Adults: Introduction

Albert Shaw, MD, PhD
Chair, Adult RSV Work Group
Advisory Committee on Immunization Practices
October 24, 2024

Adult RSV Work Group Membership

ACIP Voting Members
Albert Shaw (Chair)
Helen Chu
Mini Kamboj
Keipp Talbot

Ex Officio Members
Nicholas Geagan (FDA)
Nadine Peart Akindele (FDA)
Rachel Zhang (FDA)
Michelle Juaneza (HRSA)
Uzo Chukwuma (IHS)
Sonnie Kim (NIH/NIAID)

CDC Co-Leads
Amadea Britton
Michael Melgar

Liaisons
Bindy Crouch (AIM)
April Killikelly (NACI, PHAC)
Gretchen LaSalle (AAFP)
Ruth Lynfield (NFID)
Steven Pergam (IDSA)
Kenneth Schmader (AGS)
Winnie Siu (NACI, PHAC)
Elizabeth Skoy (APhA)
Vidya Sundareshan (ACP)
Katherine Williams (APTR)

Consultants
Robert Atmar (Baylor College of Medicine)
Doug Campos-Outcalt (University of Arizona)
Peter Donofrio (Vanderbilt University)
Marie Griffin (Vanderbilt University)
Camille Kotton (Massachusetts General Hospital)
Cynthia Lucero (Veterans Health Administration)
Rebecca Morgan (Case Western Reserve University)
Tracy Ruckwardt (NIH/NIAID)
Jonathan Temte (University of Wisconsin)

CDC Contributors

Coronavirus and Other Respiratory Viruses Division

Melissa Coughlin
Fatima Dawood
Katherine Fleming-Dutra
Jarrett Gartin
Monica Godfrey
Aron Hall
Fiona Havers
Suzanne Heitfield
Michele Hlavsa
Jefferson Jones
Ruth Link-Gelles
Agustin Lopez
Josephine Mak
Meredith McMorrow
Noelle-Angelique Molinari
Danielle Moulia
Ismael Ortega-Sanchez
Lakshmi Panagiotakopoulos
Pragna Patel
Monica Patton
Amanda Payne
Mila Prill
Lauren Roper
Melisa Shah
Diya Surie
Natalie Thornburg
Dennis Wang
Trang Wisard

Immunization Safety Office

Tarayn Fairlie
Julianne Gee
Anne Hause
Michael McNeil
Pedro Moro
Christine Olson
David Shay
John Su
Eric Weintraub

Influenza Division

Jill Ferdinands
Lisa Grohskopf

Immunization Services Division

Erin Abramsohn
Janelle King
Andrew Leidner
Amy Parker Fiebelkorn
Jamison Pike

NCIRD Office of the Director

Jessica MacNeil
Hannah Rosenblum
Melinda Wharton

June 2024 ACIP Recommendations for RSV Vaccination in Older Adults:

ACIP recommends all adults aged ≥75 years and adults aged 60–74 years who are at increased risk of severe RSV disease receive a single dose of RSV vaccine.[1,2]

1. Recommendation is for any Food and Drug Administration–approved RSV vaccine (Arexvy [GSK]; Abrysvo [Pfizer]; or mResvia [Moderna]). There is no product preference.

2. Eligible adults are currently recommended to receive a single dose of RSV vaccine; adults who have already received RSV vaccination should not receive another dose.

https://www.cdc.gov/mmwr/volumes/73/wr/mm7332e1.htm?s_cid=mm7332e1_w

Current FDA-approved RSV vaccines

- **Protein subunit (based on RSV F protein in prefusion conformation)**
  - **GSK Arexvy**[1]: monovalent RSV-A, $AS01_E$ adjuvant
  - **Pfizer Abrysvo**[2]: bivalent RSV-A/RSV-B, no adjuvant

- **Messenger RNA (mRNA, encoding RSV F protein in prefusion conformation)**
  - **Moderna mResvia**[3]: monovalent RSV-A, no adjuvant

1. https://www.fda.gov/media/167805/download
2. https://www.fda.gov/media/168889/download
3. https://www.fda.gov/media/179005/download

Current FDA-approved RSV vaccines

- **Protein subunit**
  - **GSK Arexvy**[1]: monovalent RSV-A, $AS01_E$ adjuvant
  - **Pfizer Abrysvo**[2]: bivalent RSV-A/RSV-B, no adjuvant
- **mRNA**
  - **Moderna mResvia**[3]: monovalent RSV-A, no adjuvant

Approved for prevention of lower respiratory tract disease (LRTD) caused by RSV in **adults aged ≥60 years**

1. https://www.fda.gov/media/167805/download
2. https://www.fda.gov/media/168889/download
3. https://www.fda.gov/media/179005/download

Current FDA-approved RSV vaccines

- **Protein subunit**
  - **GSK Arexvy**[1]: monovalent RSV-A, $AS01_E$ adjuvant
  - **Pfizer Abrysvo**[2]: bivalent RSV-A/RSV-B, no adjuvant

- **mRNA**
  - **Moderna mResvia**[3]: monovalent RSV-A, no adjuvant

Also approved for prevention of LRTD caused by RSV in **adults aged 50–59 years who are at increased risk for LRTD caused by RSV***

1. https://www.fda.gov/media/167805/download
2. https://www.fda.gov/media/168889/download
3. https://www.fda.gov/media/179005/download

*There is no current ACIP recommendation for RSV vaccination in **non-pregnant** adults aged <60 years.

Current FDA-approved RSV vaccines

- **Protein subunit**
  - **GSK Arexvy**[1]: monovalent RSV-A, $AS01_E$ adjuvant
  - **Pfizer Abrysvo**[2]: bivalent RSV-A/RSV-B, no adjuvant
- **mRNA**
  - **Moderna mResvia**[3]: monovalent RSV-A, no adjuvant

Also approved and recommended for active immunization of **pregnant individuals of any age*** at 32–36 weeks gestational age for the prevention of LRTD and severe LRTD caused by RSV in infants from birth through 6 months of age.

1. https://www.fda.gov/media/167805/download
2. https://www.fda.gov/media/168889/download
3. https://www.fda.gov/media/179005/download

*There is no current ACIP recommendation for RSV vaccination in **non-pregnant** adults aged <60 years.

Current FDA-approved RSV vaccines

- **Protein subunit**
  - **GSK Arexvy**[1]: monovalent RSV-A, $AS01_E$ adjuvant
  - **Pfizer Abrysvo**[2]: bivalent RSV-A/RSV-B, no adjuvant
- **mRNA**
  - **Moderna mResvia**[3]: monovalent RSV-A, no adjuvant

As of 10/22/24[4]: also approved for prevention of LRTD caused by RSV in **adults aged 18–59 years who are at increased risk for LRTD caused by RSV***

*There is no current ACIP recommendation for RSV vaccination in **non-pregnant** adults aged <60 years.

1. https://www.fda.gov/media/167805/download
2. https://www.fda.gov/media/168889/download
3. https://www.fda.gov/media/179005/download
4. https://www.pfizer.com/news/press-release/press-release-detail/us-fda-approves-pfizers-rsv-vaccine-abrysvor-adults-aged-18

Today's meeting

- No vote at today's meeting
- Since June, the Work Group has been reviewing updated data relevant to current recommendations and discussing potential policy options for an RSV vaccination recommendation in adults aged <60 years
- Today, ACIP will see presentations from FDA, as well as manufacturer presentations with updates on co-administration, duration of protection, and immunogenicity in adults with immune compromise
- The Work Group will share interpretations regarding these updates and considerations for future policy

Agenda: Thursday October 24, 2024

• Manufacturer presentation: mResvia (Moderna) coadministration with high-dose influenza vaccine	• Dr. Rituparna Das (Moderna)
• Manufacturer presentation: Abrysvo (Pfizer) immunogenicity in immunocompromised adults and coadministration with COVID-19 and influenza vaccines	• Dr. Iona Munjal (Pfizer)
• Manufacturer presentation: Arexvy (GSK) season 3 update on safety, efficacy and immunogenicity in solid organ transplant recipients	• Dr. Susan Gerber (GSK)
• Evaluation of Guillain-Barré Syndrome (GBS) following protein subunit RSV vaccination among adults 65 years and older	• Dr. Patricia Lloyd (FDA)
• Work Group interpretations	• Dr. Michael Melgar (CDC)
• ACIP open discussion and questions	

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