

IN THIS ISSUE: RESPIRATORY SYNCYTIAL VIRUS (RSV)

Respiratory Syncytial Virus (RSV): New Vaccine & Prevention Recommendations

Summary

Respiratory syncytial virus (RSV) is one of the most common causes of childhood illness, typically peaking in the winter.¹ RSV affects all age groups, however those most at risk for severe illness and death are very young children and older adults.¹ Beginning with the upcoming RSV season (fall 2023), RSV vaccinations will be available for the first time for those most at risk.^{2,3}

Background

RSV is a common respiratory virus causing progressive, mild, cold-like symptoms (e.g., runny nose, decreased appetite, coughing, sneezing, fever, wheezing).⁴ In very young infants, symptoms may only be irritability, decreased activity, and breathing difficulties.¹ Testing can be conducted using real-time reverse transcriptase-polymerase chain reaction (rRT-PCR) or antigen testing from respiratory specimens.¹

Transmission occurs through inhalation, ingestion, or direct contact with virus droplets produced by the coughs and sneezes of an infected individual or from touching droplets which have landed on items (e.g., doorknobs) where the virus can survive for hours.⁵ Contagiousness can range from two days prior to symptom onset to around seven days, but can be up to four weeks in infants with weakened immune systems.⁵ Most often, individuals are first infected with RSV as a young child (nearly all have had RSV prior to their second birthday), however, repeated infections can occur through life.⁴

Most individuals recover within one to two weeks with management of symptoms using over-the-counter medications and staying hydrated.⁶ However, for infants, young children, and older adults, complications can be serious, including but not limited to bronchiolitis and pneumonia, resulting in hospitalization as well as death [Table 1].^{5,6} People at highest risk of severe disease include premature infants, young children with weakened immune systems or congenital heart or chronic lung diseases, children with neuromuscular disorders, adults who are immunocompromised, and older adults, particularly with underlying heart or lung diseases.⁷

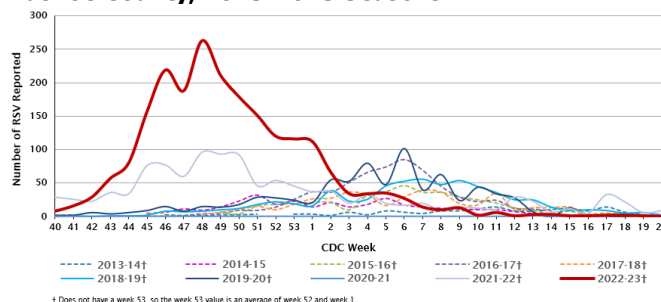
Table 1: RSV Burden Estimates, United States, Annual⁵

Age (Years)	Hospitalizations	Deaths
<5	58,000-80,000	100-300
≥ 65	60,000-160,000	6,000-10,000

Source: <https://www.cdc.gov/rsv/research/index.html>

Prior to 2020, seasonal patterns for RSV were very consistent (i.e., season start in October, peak in the winter, season end in May).⁸ With the COVID-19 pandemic, disrupted patterns were experienced.⁹ For example, beginning in 2021, the southern region of the US saw RSV circulation begin to rise in the spring months with a peak in the summer.⁸ In Washoe County, abnormal trends were also observed, culminating in the total number of RSV cases reported during the 2022-2023 influenza season being 2,045, the most cases reported in the last 22 influenza seasons on record [Fig. 1]. While this increase may be in part due to higher number of laboratories and providers reporting, the local increase mirrored regional and national trends.¹⁰

Figure 1: Number of RSV Cases Reported by Week, Washoe County, 2013-2023 Seasons†



Source: [WCHD Communicable Diseases Reported by Week](#)

**ACIP Recommendations
Adults 60 Years and Older²**

Highlights of the MMWR are provided in this Epi News issue; however, WCHD encourages all providers to read the report for greater insight and information: <https://www.cdc.gov/mmwr/volumes/72/wr/mm7229a4.htm>

On June 21, 2023, the Advisory Committee for Immunization Practices (ACIP), recommended that adults aged ≥60 years may receive a single dose of RSV vaccine, using shared clinical decision-making.

There are two options for vaccination:

- 1) GSK Vaccine: RSVPreF3 (Arexvy, GSK) 1-dose (0.5 mL) adjuvanted (AS01E) recombinant stabilized prefusion F protein (preF) vaccine.
- 2) Pfizer Vaccine: RSVpreF (Abrysvo, Pfizer) 1-dose (0.5 mL) recombinant stabilized preF vaccine.

Clinicians should offer RSV vaccination to adults aged ≥ 60 years using shared clinical decision-making once vaccine supply becomes available and should continue to offer vaccination to eligible unvaccinated adults. Coadministration of RSV vaccines with other adult vaccines during the same visit is acceptable. RSV vaccination should be delayed for persons experiencing moderate or severe acute illness with or without fever. RSV vaccines are contraindicated for and should not be administered to persons with a history of severe allergic reaction, such as anaphylaxis, to any component of the vaccine.

Infants & Young Children³

Approved recommendations are provided in this Epi News issue; however, WCHD encourages all providers to read the official MMWR that will be published in the coming months which will include more detailed recommendations here:

<https://www.cdc.gov/vaccines/hcp/acip-recs/recs-by-date.html>

On August 3, 2023, the ACIP, recommended:

- Infants aged <8 months born during or entering their first RSV season are recommended to receive one dose of nirsevimab (50 mg for infants <5 kg and 100 mg for infants ≥ 5 kg).
- Children aged 8–19 months who are at increased risk of severe RSV disease and entering their second RSV season are recommended to receive one dose of nirsevimab (200 mg).

Nirsevimab (Beyfortus) is a long-term monoclonal antibody product designed to protect infants and high-risk young children from severe RSV disease.¹ It is administered with one intramuscular injection.

WCHD's RSV Surveillance

WCHD's influenza surveillance program disseminates weekly reports that include information on reported RSV cases during the influenza season (Oct-May). If you would like to receive these reports, email epicenter@washoecounty.gov and include in the request: name, organization, and email address. Past reports are located here:

<https://tinyurl.com/FluWashoe>.

RSV Reporting Requirements

Reporting requirements are listed in Chapter [441A.660](#) of the Nevada Administrative Code (NAC). RSV must be reported to your local health department if "*there is a finding of respiratory syncytial virus in clinical specimens or by demonstration of a specific serologic response in acute and convalescent sera upon testing by a medical laboratory.*"

Report communicable diseases to the Washoe County Health District. To report a communicable disease, please call 775-328-2447 or fax your report to the WCHD at 775-328-3764.

The list of reportable communicable diseases and reporting forms can be found at:

<http://tinyurl.com/WashoeDiseaseReporting>

Acknowledgement

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