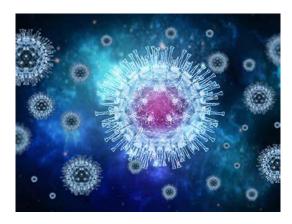
## **Considerations for RSV Prevention in Special Patient Populations**



RSV (Respiratory Syncytial Virus) is a major concern in long-term care. Facilities can inadvertently host a "perfect storm" setting for infection spread. Elderly patients (especially those with underlying cardiopulmonary and other health conditions) are of course more likely to contract and experience severe outcomes from infectious diseases and viruses than healthy adults. Humans contract RSV through respiratory droplets that reach the mouth, eyes, or nose, eventually spreading to bronchiole of the lower respiratory tract. This self-limiting virus is less limited in vulnerable populations.

This article estimates that RSV hospitalizes up to 160,000 vulnerable patients yearly due to complications, leading to 10,000 deaths. These complications may include pneumonia or bronchiolitis, presenting as shortness of breath, wheezing, bluish skin, or chest wall retractions. Severe cases may cause sepsis and/or arrhythmias. Patients may need intensive care and mechanical ventilation.

Vaccination against RSV is crucial to avoid these complications and is effective in about 80% of patients according to clinical trials. Providers can select between two possible FDA-approved versions of the RSV vaccine for patients over sixty with weakened immunity and comorbidities. These include *Abrysvo* RSVPreF by Pfizer, and *Arexvy* RSVPreF3 by GSK. Both induce an immune response to the "F" glycoprotein target of RSV that would normally allow cause fusion with cells.

Common side effects included injection site reactions, nausea, headache, or muscle pain. In both vaccine trials, less than 5 presented with Guillain-Barre Syndrome (1-2 in each trial with 17,000 - >20,000 participants,) or another neurological dysfunction.

RSV tends to peak during fall and winter, but data is lacking to show whether simultaneous administration with other vaccines or whether revaccination should occur. Patients who are moderately-severely ill should wait until they have fully recovered to receive the vaccine. Based on disease prevalence and severity combined, available RSV vaccines are a practical choice as prevention measures. In long-term care settings, vaccination of the maximal number of qualifying residents against RSV may help prevent spread and mitigate the risk of hospitalization or morbidity to this vulnerable population.

Article Link: Considerations for RSV Prevention in Special Patient Populations (pharmacytimes.com)

Image Link: Respiratory Syncytial Virus (RSV) - Children's National (childrensnational.org)