

Recommendations for Respiratory Infection Season

North Dakota Health and Human Services (HHS) would like to provide recommendations for the coming fall and winter months, considered to be respiratory infection season. The Centers for Disease Control and Prevention (CDC) is hosting a Clinician Outreach and Communication Activity (COCA) [webinar](#) on Tuesday, September 19 at 1 p.m. (CST) regarding preparing for the upcoming respiratory virus season.

INFLUENZA

Influenza Impact:

- In North Dakota, influenza activity begins to increase in the fall and typically peaks between January and March.
- A total of 11,502 influenza cases were reported to the state for the 2022-2023 season, along with over 400 influenza-related hospitalizations and 32 deaths.

Influenza - Who and when to immunize:

- Influenza vaccination is recommended for **all individuals age 6 months and older**
- Due to the unpredictability of influenza season onset and concerns about vaccine-induced immunity waning over the course of a season, flu vaccination is recommended by the end of October.
- However, it can be given throughout influenza season.
- Children 6 months through 8 years old receiving influenza vaccine for the first time require two doses given at least four weeks apart, even if they turn 9 between the first and second dose. Any child who has received two or more doses of influenza vaccine prior to July 1, 2023, or is 9 years or older, needs only one dose of flu vaccine.
- Children 6 months through 8 years who need two doses should receive their first dose as soon as possible after vaccine becomes available, to allow the second dose (which must be administered four or more weeks later) to be received by the end of October.
- Vaccination soon after vaccine becomes available may also be considered for **pregnant women during the third trimester**, as vaccination of pregnant women has been shown

to reduce risk of influenza illness of their infants during the first few months of life (a period during which they be too young to receive influenza vaccine).

- For non-pregnant adults, influenza vaccination during July and August should be avoided unless there is concern that later vaccination might not be possible.
- Influenza vaccines **can be administered at the same time as any other recommended vaccines**. For patients who are due for other routine immunizations, providers should follow [standard practices for administration and spacing of live vaccines](#), when the influenza vaccine being administered is the live attenuated influenza vaccine (LAIV) vaccine is given.

Influenza Immunization Considerations:

- **Adults 65 and older** should receive one of the higher dose or adjuvanted influenza vaccines, if available:
 - quadrivalent high-dose inactivate influenza vaccine,
 - quadrivalent recombinant influenza vaccine, or
 - quadrivalent adjuvanted inactivated influenza vaccine.
 - **If none of these vaccines is available**, any other age-appropriate influenza vaccine should be used.
- Individuals with an **allergy to eggs** may receive any influenza vaccine (egg-based or non-egg-based) that is otherwise appropriate for their age and health status.
 - Additional safety measures beyond those recommended for any vaccine administration site are no longer recommended for people with egg allergies, regardless of the severity of previous reactions to egg.

Influenza Vaccine Composition:

- The 2023-2024 influenza vaccine composition has been updated to better match strains anticipated to be prevalent.
- The trivalent vaccine contains strains: A/Wisconsin/67/2022 (H1N1) pdm09-like virus, A/Darwin/6/2021 (H3N2)-like virus and B/Austria/1359417/2021 (B/Victoria lineage)-like virus.
- While the quadrivalent vaccine contains one additional B/Phuket/3073/2013- like (Yamagata lineage) strain.

Influenza Testing and Treatment

- Influenza testing can inform decisions on use of antiviral treatment, the need for additional testing, isolation recommendations, and infection prevention and control practices.

- Rapid influenza molecular assays, rapid influenza diagnostic tests, and molecular assays are available for diagnosing influenza.
- Interpretation of influenza testing results should consider test sensitivity and specificity, prevalence of influenza in the community, time from illness onset to specimen collection, and specimen source.
- Respiratory specimens should be collected as close to illness onset as possible (ideally under three-to-four days).
- **Hospitalized patients with suspected influenza** should be tested with high sensitivity and specificity tests such as real-time polymerase chain reaction (RT-PCR) molecular assays since prompt detection is essential to implementing appropriate infection control practices.
 - **Antiviral treatment is recommended as soon as possible for hospitalized patients with suspected influenza.** See guidance on [antiviral treatment of influenza](#) recommendations for hospitalized persons and outpatients who are at high-risk for complications or those with progressive illness.
- Influenza and COVID-19 are reportable conditions and cases may be reported electronically [via our report card](#) or by calling (701) 328-2378 or (800) 472-2180.

Influenza - Why Immunize:

- Influenza vaccination of individuals 6 months and older is recommended to reduce the prevalence of illness caused by influenza and severe outcomes, including hospitalization and death.
- Last influenza season, there were 174 pediatric deaths due to influenza. Historically, most pediatric deaths due to influenza are in unvaccinated children.
- Influenza vaccination will alleviate stress on the health care system because prevention of, and reduction in, the severity of influenza illness will reduce outpatient visits, hospitalizations, and intensive care unit admissions .
- Influenza vaccination is highly recommended by every major medical organization, especially for children (American Academy of Pediatrics or AAP), pregnant women (the American College of Obstetricians and Gynecologists or [ACOG](#)), and the elderly (American Association of Family Physicians or [AAFP](#)).

Influenza Resources

- For additional information, please see www.cdc.gov/vaccines/acip/recommendations.html
- The NDHHS [influenza website](#) is updated weekly.

RESPIRATORY SYNCYTIAL VIRUS (RSV):

- Starting this fall, NEW immunizations will be available for age groups at high risk for RSV.
- A new product, nirsevimab (Beyfortus™), is available to protect infants from the impacts of RSV.
- Also new this fall are two vaccine products, Arexvy™ and Abrysvo™, that are available to protect older adults from the impacts of RSV.

RSV Impact:

- RSV is one of the most common causes of childhood respiratory illness and results in annual outbreaks of respiratory illnesses in all age groups.
- An estimated 58,000-80,000 infants and children under 5 are hospitalized each year nationwide due to RSV infection, with some requiring oxygen, intravenous (IV) fluids, or mechanical ventilation.
- Each year, an estimated 100-300 children under 5 die due to RSV.
- RSV is the leading cause of hospitalizations for infants and older babies at higher risk, and this new immunization is an important tool for saving lives.
- American Indian and Alaska Native children have RSV-associated hospitalization rates 4 to 10 times greater than the average rates for U.S. children ages 12-23 months.
- RSV causes 177,000 hospitalizations and 14,000 deaths of adults 65 and older each year in the United States.
- Nirsevimab has been shown to reduce the risk of both hospitalizations and health care visits for RSV in infants by about 80%.
- Both Arexvy™ and Abrysvo™ have been shown to have at least 80% efficacy against RSV lower respiratory tract disease.

RSV Who and When:

- CDC recommends one dose of nirsevimab for all **infants under 8 months of age** born during their first RSV season (typically October through March).
- CDC recommends one dose of nirsevimab for all infants under 8 months of age who are entering their first RSV season.
- Newborns should receive nirsevimab 50mg/0.5mL if under 5kg and 100mg/1mL if 5kg or greater within the first week of life, ideally prior to birthing hospital discharge.
- For **children between 8-19 months who are at increased risk of severe RSV disease**, a dose of 200mg (two 100mg/1mL injections for one dose) is recommended prior to their second RSV season. These children include:
 - children who have severe immunocompromise,
 - **American Indian** and Alaskan Native children,
 - children with chronic lung disease of prematurity who required medical support any time during the six-month period before the start of the second RSV season

- children with cystic fibrosis who have manifestations of severe lung disease (previous hospitalization for pulmonary exacerbation in the first year of life or abnormalities on chest imaging that persist when stable) or weight-for-length <10th percentile
- Health care providers are encouraged to conduct reminder/recall of children under 8 months of age and those who are at increased risk between 8-19 months of age.
- Adults age 60 and older may receive either Arexvy™ or Abrysvo™ after discussion and agreement with their health care provider.
 - This is an especially important consideration for those with chronic medical conditions and residents of long-term care facilities and nursing homes.
- In August, the FDA approved Abrysvo™ for use in pregnant individuals to prevent lower respiratory tract disease (LRTD) and severe LRTD caused by RSV in infants through 6 months. This vaccine is approved for use at 32- 36 weeks of pregnancy. **CDC recommendations have not yet been made for the use of this vaccine in pregnant persons.** ACIP is meeting on September 22 to discuss the use of this vaccine. CDC recommendations may follow shortly after.

RSV Immunization Considerations:

- Monoclonal antibodies are man-made proteins that mimic the antibodies that our bodies naturally produce and are a form of passive immunization to provide immediate infection prevention for a period of time.
- With nirsevimab receiving approval so near the onset of RSV season, it is possible that it **may not be available** for administration in some settings.
- In these situations, the [AAP recommends](#) that infants and children in their first or second year of life who are at higher risk of severe RSV and meet drug eligibility criteria should receive the monoclonal antibody pavalizumab (Synagis™).
 - Pavalizumab is given in a series of monthly doses.
- AAP advises that eligible children who receive fewer than 5 doses of pavalizumab in the 2023-2024 season may receive one dose of nirsevimab, but then should receive no additional pavalizumab that season.
- Children who received pavalizumab during their first RSV season who are considered to be high-risk entering their second season should receive one dose of nirsevimab if available.
- AAP also recommends that nirsevimab be given at the same time as any other age-appropriate immunizations.
- ACIP voted to include nirsevimab in the Vaccines For Children (VFC) program, which provides recommended vaccines and immunizations at no cost to children 18 and under who are American Indian/Alaskan Native, Medicaid-eligible, uninsured or underinsured. Additional information about when nirsevimab may be ordered for VFC-eligible children is forthcoming.

RSV Testing and Treatment:

- Clinical symptoms of RSV are nonspecific and can overlap with other viral respiratory infections, such as COVID-19 and influenza, as well as some bacterial infections.
- Several types of laboratory tests are available for confirming RSV infection.
- These tests may be performed on upper and lower respiratory specimens and include RT-PCR and antigen testing (which may be more sensitive in children but less sensitive in adults).
- Antiviral medication is not routinely recommended to fight RSV infection and most infections go away on their own in a week or two.

RSV – Why Immunize:

- Pooled efficacy of nirsevimab is 79% against medically attended lower respiratory tract infection (LRTI), as well as 80.6% against RSV LRTI hospitalization.

RSV Resources:

- Learn more at <https://www.cdc.gov/rsv/index.html>
- Additional guidance and educational materials will be provided by ND HHS (check hhs.nd.gov) and the CDC in the coming months.

COVID-19

COVID-19 Impact:

- COVID-19 continues to circulate in our community, with over 293,000 total reported lab-confirmed cases of COVID-19 in North Dakota since the beginning of the pandemic.
- Over the last few weeks, a new variant called [BA.2.86](#) has been detected in a small number of samples from infected people and waste (sewer) water in several countries, including the United States.
 - This variant is notable because it has multiple genetic differences compared to previous versions of SARS-CoV-2 and it has been detected in several locations within a short amount of time.
- Nationwide, COVID-19 cases and hospitalizations have been trending upwards in the United States. It is expected that the updated 2023-2024 COVID-19 vaccine will be effective at reducing severe disease and hospitalization.
- More than half of children hospitalized for COVID-19 in the United States do not have a co-morbidity. Behind adults ages 75 and older, infants younger than six months had the highest rate of COVID-19 hospitalization.

COVID-19 Immunization Composition:

- Updated mRNA 2023-2024 (XBB.1.5) COVID-19 vaccines have been recommended for use by the CDC.

- With the U.S. FDA authorization and approval of the 2023-2024 COVID-19 vaccines, the bi-valent COVID-19 vaccines (Moderna and Pfizer) are no longer authorized for use in the United States and health care providers should stop using these products immediately and dispose of them.
- The U.S. FDA has not yet authorized or approved an updated Novavax vaccine for 2023-2024. As a result, the existing Novavax vaccine may still be administered at this time if it is determined that the individual should not wait for a 2023-2024 Novavax COVID-19 vaccine.

COVID-19 – Who and When to Immunize:

- Everyone 6 months and older is recommended to receive at least one updated 2023-2024 COVID-19 vaccine.
 - **Individuals 5 years of age and older regardless of previous vaccination** are eligible to receive a single dose of an updated mRNA COVID-19 vaccine at least **2 months** since the last dose of any COVID-19 vaccine.
 - **Children ages 6 months–4 years** should complete a multi-dose initial series (2 doses of Moderna or 3 doses of Pfizer-BioNTech mRNA COVID-19 vaccine) with at least one dose of the 2023–2024 COVID-19 vaccine.
 - **People who are moderately or severely immunocompromised** should complete a 3 dose initial series with at least one dose of the 2023–2024 COVID-19 vaccine and may receive 1 or more additional 2023–2024 COVID-19 vaccine doses.
- Individuals 5 years of age and older are eligible to receive any updated mRNA COVID-19 vaccine. They do not need to receive the same brand as previously administered doses.
- Children 6 months-4 years should complete their COVID-19 vaccine series using the same brand as they've previously received.
- The benefits of COVID-19 vaccination continue to outweigh the risks. A myocarditis safety signal was not seen in the Vaccine Safety Datalink after implementation of the bi-valent COVID-19 vaccine.
- The bi-valent COVID-19 vaccine showed 60% effectiveness among children and adults against emergency department and urgent care visits.
- Amongst immunocompetent adults, the bi-valent COVID-19 vaccine was 65% effective against hospitalization, but wanes over time.

COVID-19 Immunization Considerations:

- With the authorization of the updated COVID-19 vaccines, they will now transition to the commercial market.
 - This means that vaccine will be available through the traditional routes.
 - Vaccine will be available from HHS for Vaccines for Children (VFC)-eligible children (American Indian/Alaskan Native, Medicaid-eligible, uninsured or

- underinsured) and uninsured or underinsured adults to providers enrolled in our VFC and Vaccines for Adults (VFA) programs.
- Providers must order private COVID-19 vaccine stock in order to vaccinate all privately insured children and adults.
 - COVID-19 vaccine for uninsured and underinsured adults will also be available through the Federal Bridge Access Pharmacy Program.
 - Through this program, the CDC intends to contract with retail pharmacy chains (CVS, Walgreens, and eTrueNorth) in order provide COVID-19 vaccine to underinsured and uninsured adults for no cost to the patient.
 - Patients who qualify will, in the future, be able to locate participating pharmacies at [vaccines.gov](https://www.vaccines.gov).

COVID-19 Testing and Treatment:

- [Treatments for COVID-19](#) are available for individuals early in the course of their illness and can reduce the risk of hospitalization or death following infection.
- Based on current information, existing tests used to detect and medications used to treat COVID-19 continue to be effective with the new variants.
- ND HHS Laboratory Services offers several respiratory illness diagnostic tests free-of-charge or fee-for-service.
 - SARS-CoV-2 RT-PCR is offered at no charge on NP swabs in VTM.
 - Results are available within two days after receipt at the lab.
- Influenza and COVID-19 are reportable conditions and cases may be reported electronically [via our report card](#) or by calling (701) 328-2378 or (800) 472-2180.

COVID-19 Why Immunize:






- COVID-19 variants continue to circulate and hospitalizations are trending upward nationwide.
- The updated COVID-19 vaccines will likely reduce severe illness and hospitalization.

COVID-10 Resources:

- For additional information on COVID-19, including vaccine, testing, treatment, and current disease trends, please visit our [COVID-19 website](#).

SUMMARY

Influenza, RSV, COVID-19, and other respiratory pathogens are expected to circulate this fall and winter. NDHHS reminds clinicians to consider influenza, RSV, COVID-19, and other possible pathogens when evaluating patients with respiratory illness. As many of these pathogens may share similar symptoms, respiratory testing can be used to inform decisions on use of antiviral treatment, the need for additional testing, isolation recommendations, and infection prevention and control practices.

FALL 2023 RESPIRATORY IMMUNIZATIONS	WHAT are the options?	WHO is eligible?	HOW well do they work?	WHEN should I get it?
INFLUENZA 	A vaccine that targets 4 strains of seasonal flu	6 months and older	Reduces risk of hospitalization and health care visits by 40-60%	By the end of October
COVID-19 	Updated vaccine formula targeting XBB subvariant -Moderna (mRNA) -Pfizer (mRNA)	6 months and older	40-60% less likely to have severe illness	Protection against severe disease: get it anytime Protection against infection: best to get it before a wave
RSV (OLDER ADULTS) 	-GSK -Pfizer	60 years and older	82-86% less likely to have severe illness	Protection is durable. Get when it's available
RSV (PREGNANCY) 	-Pfizer	Pregnant people (protection will pass to baby for its first 6 months of life)	82% less likely to have severe illness in first 3 months of life	CDC will make recommendations this fall
RSV ANTIBODY 	Nirsevimab (monoclonal antibody – passive immunization) -AstraZeneca -Sanofi	Child's 1st RSV season: All infants 8 months and younger Child's 2nd RSV season: High-risk infants 8-19 months, including American Indian	Reduces risk of hospitalization and health care visits by 80%	Will be available soon. Protection lasts 4-6 months

Adapted from Your Local Epidemiologist (Drs. K. Jetelina & C. Rivers)



For more information, call ND HHS Disease Control and Forensic Pathology at (701) 328-2378 or (800) 472-2180.

Categories of Health Alert Network messages:

Health Alert Requires immediate action or attention; highest level of importance

Health Advisory May not require immediate action; provides important information for a specific incident or situation

Health Update Unlikely to require immediate action; provides updated information regarding an incident or situation

HAN Info Service Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##