



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

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To: All North Carolina Clinicians
From: Emma Doran, MD, MPH, Medical Epidemiologist
Subject: 2024-2025 Respiratory Virus Season: **Treatment Update for NC Clinicians** (4 pages)
Date: September 25, 2024

This memo provides guidance and information to NC clinicians regarding treatment for acute viral respiratory infections during the 2024-2025 respiratory season. As guidance may change during the season, up to date information will be available at flu.nc.gov.

CLINICAL MANAGEMENT: If clinically indicated, decisions about starting antiviral treatment should be based on clinical and epidemiologic information and not be delayed while awaiting laboratory confirmation.

Influenza

- Antiviral treatment is recommended as soon as possible for any patient with suspected or confirmed influenza who:
 - Is hospitalized
 - Has severe, complicated, or progressive illness
 - Is at increased risk for influenza complications
- Certain patients are at increased risk for influenza-related complications. These include:
 - Children younger than 5 years of age, especially those under 2 years of age
 - Adults 65 years of age or older
 - Pregnant people and people up to 2 weeks after the end of pregnancy
 - Hispanics or Latinos, African Americans, and American Indian/Alaska Natives
 - Persons with certain medical conditions including: asthma; neurological and neurodevelopmental conditions; chronic lung diseases; heart diseases; blood disorders; endocrine disorders; kidney diseases; liver disorders; metabolic disorders; and weakened immune system due to disease (such as people living with HIV or AIDS, or some cancers such as leukemia), or medications (such as those receiving chemotherapy or radiation treatment for cancer, or persons with chronic conditions requiring chronic corticosteroids or other drugs that suppress the immune system)
 - People younger than 19 years of age who are receiving long-term aspirin therapy or salicylate-containing medications
 - People who are obese with a Body Mass Index (BMI) of 40 kg/m² or higher
 - People who live in nursing homes or other long-term care facilities
 - People who have had a stroke

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AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

- Treatment is most effective when started within 48 hours of illness onset. However, treatment of persons with prolonged or severe illness can reduce mortality and duration of hospitalization even when started more than 48 hours after illness onset.
 - Detailed guidance on antiviral use is available [here](#).

Antiviral Treatment	Who	How
Oseltamivir (Tamiflu)	-Hospitalized patients any age -Outpatient adults and children any age with complications or progressive disease -Outpatient adults and children any age with acute uncomplicated influenza -Pregnant people	Orally for 5 days
Zanamivir (Relenza)	-Outpatient adults and children ages 7 years and older with acute uncomplicated influenza	Inhaled for 5 days
Peramivir (Rapivab)	-Outpatient adults and children ages 6 months and older with acute uncomplicated influenza	Intravenous (IV) for 1 day
Baloxavir (Xofluza)	-Outpatient adults and children ages 5 years and older who are otherwise healthy with acute uncomplicated influenza OR -Adults and children ages 12 years and older who are at high risk of developing complications	Orally for 1 day

- Chemoprophylactic use of antiviral medications is recommended to control flu outbreaks among high-risk persons in institutional settings (e.g. congregate living facilities and health care facilities). For control of outbreaks in institutional settings, CDC recommends antiviral chemoprophylaxis of exposed residents with oral oseltamivir or inhaled zanamivir for a minimum of 2 weeks and continuing up to 1 week after the last known case was identified. Antiviral chemoprophylaxis is recommended for all residents, including those who have received influenza vaccination.
- Post-exposure chemoprophylaxis could also be considered for close contacts of cases (confirmed or suspected) who are at high risk for complications of influenza, including pregnant women, if antivirals can be started within 48 hours of the most recent exposure. Recommended duration is 7 days (after last known exposure).
 - More information on influenza chemoprophylaxis can be found [here](#).

Antiviral Prophylaxis	Who	How
Oseltamivir (Tamiflu)	Adults and children ages 3 months and older*	Orally for 7 days
Zanamivir (Relenza)	Adults and children ages 5 years and older	Inhaled for 7 days
Baloxavir (Xofluza)	Adults and children ages 5 years and older	Orally for 1 day

*For infants younger than 3 months old, use of oseltamivir for chemoprophylaxis is not recommended unless the situation is judged to be critical due to limited data in this age group

COVID-19

- Antiviral treatment of outpatients at risk of severe COVID-19 reduces their risk of hospitalization and death. [Risk factors](#) for severe COVID-19 include:
 - Age over 50 years, with risk increasing substantially at age ≥ 65 years

- Being unvaccinated or not being up to date on COVID-19 vaccinations
- Specific medical conditions and behaviors with conclusive high risk including asthma, cancer, cerebrovascular disease, chronic kidney, lung and liver diseases, cystic fibrosis, dementia, diabetes mellitus, disabilities including Down syndrome, heart failure, coronary artery disease, cardiomyopathies, HIV or AIDS, mood disorders, neurologic conditions including dementia, obesity, physical inactivity, pregnancy and recent pregnancy, primary immunodeficiencies, smoking (current and former), solid organ or blood stem cell transplantation, tuberculosis and use of corticosteroids or other immunosuppressive medications
- Some racial and ethnic minority groups are at risk of being disproportionately affected by COVID-19 because of many factors, including limited access to vaccines and healthcare.
- There are several FDA-authorized or approved antiviral medications that are commercially available to treat mild to moderate COVID-19 in people who are at high risk of complications.
 - Detailed clinical considerations for COVID-19 treatment in outpatients can be found [here](#).

Antiviral Treatment	Who (Among people at high risk of complications)	When	How	Patient Assistance Available
Nirmatrelvir with Ritonavir (Paxlovid)*	Adults and children ages 12 years and older	Start as soon as possible; <u>must begin within 5 days of when symptoms start</u>	Orally for 5 days	To ensure patients pay as little as \$0 for Paxlovid, regardless of insurance status, prescribers can enroll their patients in PAXCESS by going to paxlovid.iassist.com or by calling 1-877-C19-PACK
Remdesivir (Veklury)	Adults and children aged 28 days and older and at least 3kg	Start as soon as possible; <u>must begin within 7 days of when symptoms start</u>	Intravenous (IV) for 3 days	Patient support is available at Gilead's Advancing Access
<i>Recommended to use if above medications cannot be used or unavailable.</i>				
Molnupiravir (Lagevrio)	Adults only	Start as soon as possible; <u>must begin within 5 days of when symptoms start</u>	Orally for 5 days	The Merck Patient Assistance Program offers free Lagevrio to eligible patients. Visit MerckHelps.com/LAGEVRIO or call 1-800-727-5400

*Clinicians should be aware of Paxlovid interactions and contraindications. FDA has created a [eligibility screening checklist tool](#) for prescribers.

- Pre-exposure prophylaxis medication is available for people who are moderately or severely immunocompromised and unlikely to mount an adequate immune response to COVID-19 vaccination for additional protection against COVID-19.
 - Pre-exposure prophylaxis helps prevent COVID-19 but does not take the place of vaccination in people who are eligible to receive an updated COVID-19 vaccine.
 - More information about pre-exposure prophylaxis can be found [here](#).

Pre-Exposure Prophylaxis	Who	When	How
Pemivibart (Pemgarda)	Adults and children 12 years and older who have moderate-to-severe immune compromise	Administer at least 2 weeks after receiving a dose of COVID-19 vaccination	Intravenous (IV) administered as a single infusion once every 3 months

- FDA has authorized or approved the use of several medications for hospitalized patients with severe or critical illness due to COVID-19. Clinicians can find general considerations and recommendations for their care in the [IDSA Guidelines on the Treatment and Management of Patients with COVID-19](#).

RSV and other respiratory viruses: There is no specific treatment available for RSV.

Patients should seek emergency medical attention for any of the following:

- Difficulty breathing or shortness of breath
- Persistent pain or pressure in the chest or abdomen
- Persistent dizziness or confusion
- Severe muscle pain, weakness or unsteadiness
- Not urinating
- Fever or cough that improve but then return or worsen
- Worsening of chronic medical conditions
- In children, fever above 104° F, bluish gray skin color, lack of responsiveness, extreme irritation, dehydration (no urine for 8 hours, dry mouth, no tears when crying), or ribs pulling in with each breath
- Any other symptom that is severe or concerning

Clinicians should contact their [Local Health Departments](#) or the Communicable Disease Branch epidemiologist on-call available 24/7 at (919) 733-3419 for questions about respiratory viral treatments.

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