



Medical Assistance Division Medicaid Drug Utilization Review Intervention

Volume 13 Issue 2

4th Quarter 2019



DUR Board Members

Amy Bachyrycz, PharmD

Greg D'Amour, RPh,
PhC, CGP

Stacey Dalton, PharmD

Krista Dominguez-
Salazar, PharmD

Daniel Duhigg, DO

David Johnson, MD

Ariel Scott, MD

John Seibel, MD

Jennifer Smith, PharmD

Gregory Toney, PharmD,
BCPP

Keun-Kyu Yi, RPh

Influenza Vaccination 2019-2020 Katie Wilbers, PharmD

This newsletter is published by the New Mexico (NM) Drug Utilization Review (DUR) Board to promote safe and cost-effective drug therapy in the NM Fee-For-Service (FFS) Program. It is our hope that this educational newsletter will be useful to your practice.

Background

Influenza, one of the most common infectious diseases, occurs in seasonal epidemics and manifests as an acute febrile illness with systemic symptoms ranging from mild fatigue to respiratory failure and death. Influenza causes significant loss of workdays, distress, and mortality. The Centers for Disease Control and Prevention (CDC) estimates that seasonal influenza is responsible for more than 20,000 US deaths annually.

Although the precise timing of the onset, peak, and end of influenza activity varies from one season to the next, annual epidemics typically occur in the United States between October and April. The duration and severity of the epidemics depends on the virus subtype involved.

While persons of all ages are susceptible to influenza, reportedly, the highest rates of outpatient visits for influenza-positive illness occur among children aged 2 through 17 years. Hospitalizations and deaths related to seasonal influenza are typically greatest among persons aged ≥ 65 years, children aged < 5 years (particularly those < 2 years), and persons of any age who have medical conditions that confer increased risk for complications from influenza.

Prevention of influenza is the most effective management strategy. The CDC recommends a yearly flu vaccine as the first and most important step in flu prevention. In an observational study published in *Pediatrics* April 2017, influenza vaccine was associated with reduced risk of laboratory-confirmed influenza-associated pediatric death.

New for the 2019/2020 Influenza Season

The following are new for this influenza season:

- The influenza A (H1N1) component of the flu vaccine has been updated to better match circulating viruses and the quadrivalent vaccine will contain an additional influenza B virus.
- Pregnant women may receive any licensed, recommended and age-appropriate vaccine.
- Afluria Quadrivalent is now licensed for persons aged ≥ 6 months. The dose volume is 0.25 mL per dose (containing 7.5 μg of HA per vaccine virus) for children aged 6 through 35 months and 0.5 mL per dose (containing 15 μg of HA per vaccine virus) for all persons aged ≥ 36 months (≥ 3 years).
- Children aged 6 through 35 months who receive Fluzone Quadrivalent may now receive either 0.25 mL (containing 7.5 μg of HA per vaccine virus) or 0.5 mL (containing 15 μg of HA per vaccine virus) per dose. Children aged ≥ 3 years and adults should receive 0.5 mL per dose.

Inside This Issue

- Influenza Vaccine 2019-2020

2019-2020 Vaccination Recommendations

The Advisory Committee on Immunization Practices (ACIP) and CDC recommend everyone 6 months and older, including pregnant women, receive an injectable influenza vaccine.⁴ Optimally, vaccines should be administered by the end of October. However, since significant seasonal influenza virus activity can continue into May, vaccination administered in December or later can still be beneficial, even if given after the influenza season has begun. The table below highlights vaccine recommendations for high-risk patients.

• Children age 6-59 months, adults ≥ 50
• Persons with chronic pulmonary (including asthma), cardiovascular (excluding isolated hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus)
• Persons who are immunocompromised due to any cause (including medications or HIV infection)
• Women who are or will be pregnant during the influenza season
• Children and adolescents (aged 6 months through 18 years) receiving aspirin or salicylate-containing medications and who might be at risk for Reye syndrome
• Residents of nursing homes and other long-term care facilities
• American Indians/Alaska Natives
• Persons who are extremely obese (BMI ≥ 40)
• Caregivers and contacts of those at risk: <ul style="list-style-type: none"> ○ Health care personnel in inpatient and outpatient care settings, medical emergency-response workers, employees of nursing home and long-term care facilities who have contact with patients or residents, and students in these professions who will have contact with patients; ○ Household contacts and caregivers of children aged ≤ 59 months (i.e., < 5 years), particularly contacts of children aged < 6 months, and adults aged ≥ 50 years; and ○ Household contacts and caregivers of persons with medical conditions that put them at high risk of severe complications from influenza.

Recent studies show that influenza vaccination reduces the risk of flu by between 40% and 60% in the general population during seasons when most circulating viruses are well-matched to the vaccine.⁵ During the 2018-2019 season, the adjusted overall vaccine efficacy was estimated at 47%. Recommended 2019-2020 influenza vaccines include a number of trivalent and quadrivalent inactivated injectable vaccines and recombinant influenza vaccines.

Influenza vaccines — United States, 2019-20 influenza season*

Name	Manufacturer	Age	Route
<i>Inactivated Influenza Vaccines, Quadrivalent (IIV4)</i>			
Afluria Quadrivalent	Seqirus	≥ 6 months**	IM
Fluarix Quadrivalent	GlaxoSmithKline	≥ 6 months	IM
Flucelvax Quadrivalent	Seqirus	≥ 4 years	IM
FluLaval Quadrivalent	ID Biomedical Corp. of Quebec	≥ 6 months	IM
Fluzone Intradermal Quadrivalent	Sanofi Pasteur	18-64 years	ID
Fluzone Quadrivalent	Sanofi Pasteur	≥ 6 months****	IM
<i>Inactivated Influenza Vaccines, Trivalent (IIV3)</i>			
Fluad	Seqirus	≥ 65 years	IM
Fluzone High-Dose	Sanofi Pasteur	≥ 65 years	IM
<i>Recombinant Influenza Vaccine, Quadrivalent (RIV4)</i>			
Flublok Quadrivalent	Protein Sciences	≥ 18 years	IM
<i>Recombinant Influenza Vaccine, Trivalent (RIV3)</i>			
Flublok	Protein Sciences	≥ 18 years	IM
<i>Live Attenuated Influenza Vaccine, Quadrivalent (LAIV4)</i>			

FluMist	AstraZeneca	2-49 years	NAS
---------	-------------	------------	-----

IM = Intramuscular ID = Intradermal

* Immunization providers should check Food and Drug Administration–approved prescribing information for 2017–18 influenza vaccines for the most complete and updated information, including (but not limited to) indications, contraindications, warnings, and precautions. Package inserts for U.S.-licensed vaccines are available at

<https://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm093833.htm>

** 0.25ml prefilled syringe: 6-35 months 0.5ml prefilled syringe: ≥3 years Jet injector: 18-64 years

*** Jet injector: 18-64 years

**** 0.25ml prefilled syringe: 6-35 months

People with Egg Allergies

ACIP removed the recommendation that egg-allergic recipients should be observed for 30 minutes following vaccination for signs and symptoms of an allergic reaction. People with a history of severe allergic reaction to egg (i.e., any symptom other than hives) should be vaccinated in an inpatient or outpatient medical setting under the supervision of a healthcare provider who is able to recognize and manage severe allergic conditions. Providers should consider observing all patients regardless of allergy history for 15 minutes after administration of any vaccine to decrease the risk for injury should the recipient experience syncope, per the General Best Practices Guidelines on Immunization.

Health Care Workers

CDC, ACIP and the Healthcare Infection Control Practices Advisory Committee (HICPAC) recommend that all US health care workers receive an influenza vaccine annually. Since health care workers may care for or live with people at risk for influenza-related complications, getting vaccinated is especially important. Annual vaccination is recommended because influenza is unpredictable. Flu viruses are constantly changing, and immunity from vaccination declines over time.

Antiviral Medications

While influenza vaccination is the best way to prevent illness, receiving the vaccine does not completely rule out the possibility of influenza virus infection. Early treatment with an influenza antiviral agent can shorten the duration of fever and illness symptoms, and may reduce the risk of complications from influenza infection (e.g., otitis media in young children, pneumonia and respiratory failure). Clinical judgment on disease severity and progression, age, underlying medical conditions, and time since onset of symptoms is important when deciding whether to initiate influenza antiviral treatment in high-risk outpatients. When indicated, treatment should be started as soon as possible after illness onset, ideally within 48 hours. However, antiviral treatment might have some benefits in patients with severe, complicated or progressive illness, and in hospitalized patients when started later.

Four influenza antiviral medications are recommended for use in the U.S. during the 2019-2020 influenza season and these drugs have activity against both influenza A and B viruses, and any agent can be used in outpatients with acute uncomplicated influenza. Oseltamivir is recommended for outpatients with severe or complicated illness and pregnant women. The doses and durations of treatment recommended by the CDC and the American Academy of Pediatrics are provided in the table below.

Recommended Dosage and Duration of Influenza Antiviral Medications for Treatment

Drug	Days	Dose – Children	Dose – Adults and Adolescents
Baloxavir marboxil (oral)	Single Dose	Age 12 and older weighing ≥80 kg: 80 mg one time single dose Age 12 and older weighing 40-79 kg: 40 mg one time single dose	80 kg or more 80 mg one time single dose 40-79 kg 40 mg one time single dose
Oseltamivir (Oral)	5 days ¹	Age < 1 year: 3 mg/kg twice daily Age 1-12 years <=15 kg - 30 mg twice daily >15 to 23 kg - 45 mg twice daily >23 to 40 kg - 60 mg twice daily >40 kg - 75 mg twice daily	75 mg twice daily
Zanamivir (Inhaled)	5 days	Age 7-12 years: 10 mg (two 5-mg inhalations) twice daily	10 mg (two 5-mg inhalations) twice daily
Peramivir (Intravenous)	1 day ¹	Age 2-12years: One 12 mg/kg dose, up to 600 mg, via intravenous infusion for a minimum of 15 minutes	One 600 mg dose, via intravenous infusion for a minimum of 15 minutes

¹ Longer daily dosing of oral oseltamivir or intravenous peramivir can be considered for patients who remain severely ill after 5 days of treatment.

The CDC does not recommend the routine use of antiviral medications for chemoprophylaxis, except as one of multiple interventions to control institutional influenza outbreaks. Routine use of post-exposure chemoprophylaxis is not recommended, but it can be considered in persons at high risk of influenza complications during the first two weeks following vaccination, in high-risk persons who cannot receive the vaccine due to a contraindication, or in persons with severe immune deficiencies who may not respond to vaccination.

Conclusion

Influenza vaccination remains the most effective means for preventing influenza infection and its complications. Influenza vaccinations should be offered during routine healthcare visits and hospitalizations to all patients 6 months and older. Additional educational materials for your office are available from the CDC and can be obtained at: <https://www.cdc.gov/flu/resource-center/toolkit/index.htm#printreadymaterials>.

To report medical fraud, contact the Medicaid Quality Assurance Bureau at NMMedicaidFraud@state.nm.us or (505) 827-3100. We appreciate your continued support of our efforts to encourage quality care for our Medicaid clients.

Questions and/or comments about this newsletter may be directed to Diana Moya, R.Ph. at (505) 827-3174 or DianaJ.Moya@state.nm.us. DUR newsletters are posted on the New Mexico Human Services Department website: <http://www.hsd.state.nm.us/providers/utilization-review.aspx>.

References:

- Centers for Disease Control and Prevention (CDC). Influenza (flu). Available at: <https://www.cdc.gov/flu/index.htm>. Accessed September 24, 2019.
- Centers for Disease Control and Prevention (CDC). People at High Risk of Flu Complications. Available

at:https://www.cdc.gov/flu/highrisk/index.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fflu%2Fabout%2Fdisease%2Fhigh_risk.htm. Accessed September 24, 2019.

3. Grohskopf LA, Alyanak E, Broder KR, Walter EB, Fry AM, Jernigan DB. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2019–20 Influenza Season. *MMWR Recomm Rep* 2019;68(No. RR-3):1–21. DOI: <http://dx.doi.org/10.15585/mmwr.rr6803a1>. Accessed September 24, 2019.
4. Centers for Disease Control and Prevention (CDC). Vaccine Effectiveness: How well do the flu vaccines work? Available at: <https://www.cdc.gov/flu/vaccines-work/vaccineeffect.htm>. Accessed September 24, 2019.
5. Centers for Disease Control and Prevention (CDC). Influenza Antiviral Medications. Available at: <https://www.cdc.gov/flu/professionals/antivirals/index.htm>. Accessed September 24, 2019.
6. CDC and Medscape. Campbell AJ. CDC Expert Commentary. What’s new for treating flu? CDC 2019 antiviral drug recommendations. January 22, 2019. Available at: https://www.medscape.com/viewarticle/907987?src=par_cdc_stm_mscpedt&faf=1. Accessed September 24, 2019.



<< Provider Name>>

<<Provider ID>>

**Influenza Vaccination 2019-2020
Prescriber Response Form**

The New Mexico Human Services Department and Medicaid Drug Utilization Review Board are interested in improving information provided to medical professionals. Gathering feedback from you is a vital part of this process. Your input will be considered in future publications. Please answer the following questions and fax to: 804-644-4241. Thank you for your assistance.

1. What is your area of practice?

____A. General Family Practice

____B. Pediatrician

____C. Psychiatrist

____D. Specialty Please specify: _____

2. Did you find this newsletter to be informative?

____A. Yes

____B. No

Please explain: _____

3. Did the information assist you in improving patient care?

____A. Yes

____B. No

Please explain: _____

Please share any drug topic suggestions or issues of concern for future publications:

