

PALLIATIVE PEARLS

BY ENCLARA PHARMACIA

Vaccination Considerations at End of Life

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Vaccinations protect against vaccine-preventable diseases. Although most adults receive the majority of recommended vaccinations as children, immunity from childhood vaccines can wear off over time. In addition, adults are at risk for different diseases as they age. Persons receiving hospice care are at considerably high risk for serious complications if they contract a vaccine-preventable disease.¹

Hospice pharmacy providers field various questions about vaccination in hospice. Below are a few of the most frequently asked questions and answers.

Vaccine Billing

FREQUENTLY ASKED QUESTION:

“Can hospice bill Medicare for administration of vaccines? If so, which ones?”

ANSWER:

The vaccines below may be billed to Medicare by hospice with the following stipulations:^{2,3}

- **Influenza:** Once per influenza season
- **Pneumococcal:** An initial pneumococcal vaccine to patients who never received the vaccine under Medicare Part B
- **Hepatitis B:** Scheduled doses for patients at intermediate or high risk for contracting hepatitis B as described below:
 - High risk groups: ESRD patients, hemophiliacs who receive Factor VIII or IX concentrates, clients of institutions for the mentally disabled, persons who live in the same household as a Hepatitis B Virus (HBV) carrier, homosexual men, illicit injectable drug abusers and persons diagnosed with diabetes mellitus.
 - Intermediate risk groups: Staff in institutions for the mentally disabled, workers in health care professions who have frequent contact with blood or blood-derived body fluids during routine work.

Additional vaccines may be appropriate for a patient enrolled in hospice depending on their immunization history and risk for contracting vaccine-preventable diseases. The Centers for Disease Control and Prevention guide, “Immunizing Adult Patients: Standards for Practice” is an excellent resource.⁴

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Immunocompromised Status ^{5,6}

FREQUENTLY ASKED QUESTION:

“My patient has cancer. Is she still able to receive her flu shot?”

ANSWER:

Vaccines are important for patients with cancer, but live vaccines should generally be avoided; administration of inactivated vaccines is generally accepted depending on the specific vaccine.

Adults with cancer should receive an inactivated influenza vaccine annually with the exception of patients receiving anti-B cell antibodies (i.e., rituximab). Although inactivated vaccines are generally avoided in patients receiving intensive chemotherapy, administration can still be given to protect against circulating seasonal strains of influenza. Immunization of family members and hospice staff is also strongly recommended.⁵

In additions to those with cancer (with or without active chemotherapy), hospice patients with a high-level of immunosuppression for which live vaccines should be avoided include:

- HIV infection with a CD4 cell count <200 cells/ μ L
- Receipt of daily corticosteroid therapy with \geq 20 mg of prednisone or equivalent for \geq 14 days
- Primary immunodeficiency disorder (i.e., severe combined immunodeficiency or complement component deficiency)⁵

Shingles Vaccine ^{7,8}

FREQUENTLY ASKED QUESTION:

“NG is a 60 year-old patient with end-stage heart disease and a history of varicella (chickenpox) infection at age 25. Today, new lesions are noted on his back with symptoms consistent with shingles. Is this patient a candidate for the recently released shingles vaccine?”

ANSWER:

Herpes zoster (shingles) vaccination is indicated for adults aged \geq 50 years to reduce the risk of developing herpes zoster infection and postherpetic neuralgia and NOT indicated for the treatment of these conditions. There are certain precautions and contraindications to vaccination, particularly in patients with HIV, post-transplant or malignancy. Vaccination is appropriate for those taking low-dose immunosuppressive therapy, anticipating immunosuppression or recovering from immunocompromising illness. There are two herpes zoster vaccinations:

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- Zoster vaccine live (Zostavax[®], ZVL) - live attenuated vaccine
- Recombinant zoster vaccine (Shingrix[®], RZV) - non-live recombinant glycoprotein E vaccine

The Centers for Disease Control and Prevention (CDC) recommends RZV over ZVL for the prevention of shingles and related complications. Vaccination is indicated regardless of past episodes of shingles or receipt of the zoster vaccine live (ZVL) formulation.

NG has no contraindications for use and can be administered the RZV vaccine however the CDC recommends waiting until the shingles rash disappears before administering the vaccine, with no specific wait time between.⁹

Egg Allergy¹⁰

FREQUENTLY ASKED QUESTION:

“My patient has an egg allergy. Can he get the flu shot this season?”

ANSWER:

Administration of any licensed flu vaccine, that is otherwise appropriate for their age and health, is appropriate in all patients with a history of egg allergy and patients no longer have to wait 30 minutes after receiving their vaccine. It’s important to note that patients with more severe reactions to eggs will need to take additional precautions:

Only hives after exposure to egg

- Given in any medical setting

Symptoms other than hives after exposure to eggs, such as angioedema, respiratory distress, lightheadedness, or recurrent emesis; or who have needed epinephrine or another emergency medical intervention

- Given in a medical setting supervised by a health care provider who is able to recognize and manage severe allergic conditions (i.e., hospitals, clinics, health departments and physician offices). Weigh risk versus benefit.

Regardless of medical setting, all healthcare professionals licensed to give vaccines should be prepared with an emergency medical protocol to manage adverse reactions at the time of administration. Most protocols include guidance on the use of equipment (i.e., syringes, stethoscope) and medications, such as epinephrine and antihistamines.¹¹

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Influenza Vaccine Beyond Use Date (Expiration)¹²

FREQUENTLY ASKED QUESTION:

“Once influenza vaccine multi-dose vial is used, how long can I keep the vial?”

ANSWER:

A multi-dose vial (MDV) contains more than one dose of vaccine. Because MDVs typically contain a preservative to help prevent the growth of microorganisms, they can be entered or punctured more than once. The vial should be discarded in all of the following instances:

- After the maximum number of doses has been withdrawn
- Once the expiration date printed on the vial is reached
- If the vaccine is contaminated or compromised in some way

Some other important notes:

- Draw up vaccine only at the time of administration
- Store used and unused vials refrigerated according to product-specific storage and handling information (generally 35-46°F)
- Do not freeze vial
- Protect vial from light

For additional information on this topic, please review these references:

1. Vaccines & Immunizations. Centers for Disease Control and Prevention (CDC). 2018 Jul 12. Accessed 2018 Aug 2. Available from: <https://www.cdc.gov/vaccines/vac-gen/default.htm>
2. Medicare Patient Vaccine Administration: Compliance for Hospice Providers. National Hospice and Palliative Care Organization – Compliance Clips. 2016 Dec. Accessed 2018 Aug 2. Available from: https://www.nhpco.org/sites/default/files/public/regulatory/Flu_and_other_vaccines.pdf
3. Medicare Preventive Services. MLN Education Tool. 2018 Jun. Accessed 2018 Aug 2. Available from: <https://www.cms.gov/Medicare/Prevention/PrevntionGenInfo/medicare-preventive-services/MPS-QuickReferenceChart-1.html>
4. Immunizing Adult Patients: Standards for Practice. Centers for Disease Control and Prevention (CDC). 2016 May. Accessed 2018 Aug 2. Available from: <https://www.cdc.gov/vaccines/hcp/adults/downloads/standards-immz-adults.pdf>
5. Hibberd PL. Immunization in adults with cancer. UpToDate. 2018 Mar 1.
6. Rubin LG, et al. 2013 IDSA Clinical Practice Guideline for Vaccination of the Immunocompromised Host. *CID*. 2014 Feb 1; 58(3):e44–e100.
7. Albrecht MA, Levin MJ. Vaccination for the prevention of shingles (herpes zoster). UpToDate. 2018 Mar 23.
8. Clinical Resource, Shingles Vaccine: FAQs. Pharmacist’s Letter/Prescriber’s Letter. December 2017.

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9. Shingrix Recommendations. Centers for Disease Control and Prevention (CDC). 2018 Jan 25. Accessed 2018 Aug 2. Available from: <https://www.cdc.gov/vaccines/vpd/shingles/hcp/shingrix/recommendations.html>
10. Flu Vaccine and People with Egg Allergies. Centers for Disease Control and Prevention (CDC). 2017 Dec 28. Accessed 2018 Aug 2. Available from: <https://www.cdc.gov/flu/protect/vaccine/egg-allergies.htm>
11. Medical Management of Vaccine Reactions in Adult Patients. 2017 June 18. Available from: <http://www.immunize.org/catg.d/p3082.pdf>
12. CDC Vaccine Storage & Handling Toolkit. January 2018. Available from: <https://www.cdc.gov/vaccines/hcp/admin/storage/toolkit/storage-handling-toolkit.pdf>