Volume 18 – Number 3

October 2014
(Content current as of October 21)

VACCINATE ADULTS!

from the Immunization Action Coalition — www.immunize.org

What's In This Issue

New ACIP Recommendations Include Important Changes for the Use of Influenza and Pneumococcal Vaccines

Influenza Vaccination

The Centers for Disease Control and Prevention (CDC) published its updated influenza recommendations titled "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of ACIP—U.S., 2014–15 Influenza Season" in the August 15 issue of *MMWR* available at www.cdc.gov/mmwr/pdf/wk/mm6332.pdf, pages 691–697. All people age 6 months and older who do not have contraindications should receive influenza vaccination annually—this has been a core ACIP recommendation since the 2010–11 influenza season. For IAC's up-to-date screening checklists for precautions and contraindications to influenza vaccination for adults, see pages 14 and 15 of this issue.

For complete details about influenza vaccine use in 2014–15, including contraindications and precautions, consult the ACIP recommendations.

Pneumococcal Vaccination

On September 19, CDC published "Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine Among Adults Aged ≥65 Years: Recommendations of ACIP" in *MMWR* available at www.cdc.gov/mmwr/pdf/wk/mm6337.pdf, pages 822–825. It is now recommended that all adults age 65 years and older receive both pneumococcal conjugate vaccine (PCV13, Prevnar 13, Pfizer) and pneumococcal polysaccharide vaccine (PPSV23, Pneumovax, Merck). Both PCV13 and PPSV23 should be administered routinely in series to all adults age 65 years and older. For specific details about timing and spacing of these doses, refer to the published recommendations as well as IAC's "Ask the Experts" on page 23. Also, see page 10 for a two-page CDC fact sheet for patients and providers titled "Pneumococcal Vaccines (PCV13) and (PPSV23): Addressing Common Questions about Pneumococcal Vaccination for Adults."

Immunization questions?

- Email nipinfo@cdc.gov
- Call your state health dept. (phone numbers at www.immunize.org/coordinators)

Ask the Experts

Andrew T. Kroger, MD, MPH

Donna L. Weaver, RN, MN

The Immunization Action Coalition thanks medical officer Andrew T. Kroger, MD, MPH, and nurse educator Donna L. Weaver, RN, MN, both from the National Center for Immunization and Respiratory Diseases at the Centers for Disease Control and Prevention.

Influenza vaccine

I've heard there is a newer influenza vaccine that can be given to people with severe egg allergy. Is that true?

Yes. If someone age 18 through 49 years has a severe allergy to eggs with symptoms suggestive of anaphylaxis, then the provider can use a recombinant influenza vaccine (RIV3, Flublok, Protein Sciences) that is egg-free. Unlike current production methods for other available seasonal influenza vaccines, production of RIV3 does not use the whole influenza virus or chicken eggs in its manufacturing process. If RIV3 is not available or the person is not age-eligible, then inactivated influenza vaccine should be administered by a physician with experience in the recognition and management of severe allergic conditions.

A study has now been published (N Engl J Med 2014; 371:635–45) that found that the injectable vaccine Fluzone High-Dose (Sanofi) protects people 65 years and older better than standard-dose Fluzone. Does ACIP preferentially recommend use of Fluzone High-Dose for all people age 65 years and older?

Despite published evidence of better protection from Fluzone High-Dose when compared to standard-dose Fluzone, ACIP has not stated a preference for this vaccine for people age 65 years and older.

Pneumococcal vaccine

Please describe the new ACIP recommendations for the use of PCV13 vaccine along with PPSV23 vaccine in people age 65 years and older. Can we give both vaccines at the same visit?

According to the ACIP recommendations published in September 2014, both pneumococcal conjugate vaccine (PCV13, Prevnar 13, Pfizer) and pneumococcal polysaccharide vaccine (PPSV23, Pneumovax, Merck) should be administered routinely in a series to all adults age 65 years and

Ask the Experts *. . . continued on page 23* ▶

Vaccinate Adults!

online at www.immunize.org/va

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IAC, a 501(c)(3) charitable organization, publishes practical immunization information for health professionals to help increase immunization rates and prevent disease.

The Immunization Action Coalition is also supported by

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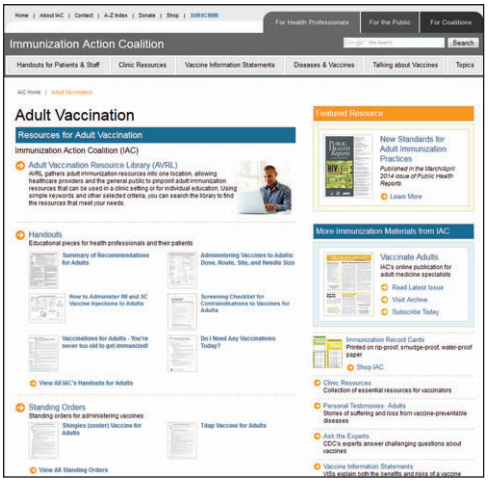
IAC maintains strict editorial independence in its publications.

New! Visit "Adult Vaccination" on immunize.org

To provide one-stop access to practical and clinically relevant information about vaccinating adults, the Immunization Action Coalition (IAC) has developed a new section on immunize.org titled "Adult Vaccination." Visit www.immunize.org/adult-vaccination often!

The new web page brings together resources from multiple sources, including CDC, the National Vaccine Advisory Committee (NVAC), state health departments, professional societies, medical journals, and IAC. You'll find helpful vaccination-related resources, such as Advisory Committee on Immunization Practices (ACIP) recommendations, educational materials for healthcare providers, videos, selected journal articles, patient handouts, PowerPoint presentations, and much more.



www.immunize.org/adult-vaccination

Adult Vaccination Resources Library

IAC's online library gives healthcare providers and the general public quick access to reliable, science-based information about adult immunization. Recently updated, the IAC library now includes approximately 250 adult immunization resources from a variety of sources. Materials are available in many media formats, including print, video, online, web-on-demand, and interactive. Access the library at www.immunize.org/adult-vaccination/resources.asp.

Adult Handouts for Patients and Staff

IAC's new Adult Vaccination Handouts section, www.immunize.org/handouts/adult-vaccination.asp, features more than 50 educational pieces for healthcare professionals and their patients. From screening checklists to patient information materials, this collection helps you carry out your vaccination activities. Several patient handouts are also available in Spanish and other languages. Also, don't miss IAC's series of standing orders for adult vaccination; all are available at www.immunize.org/standing-orders.

NVAC's Standards for Adult Immunization

Earlier this year, NVAC released "Standards for Adult Immunization Practice." The updated NVAC standards ask healthcare professionals to take steps to ensure that their adult patients are fully immunized and have maximum protection from serious diseases. CDC has created new materials to assist healthcare professionals in implementing NVAC's new standards, including a series of fact sheets encouraging improvement of vaccine assessment, recommendation, administration, and referral. Access information on the NVAC standards at www.immunize.org/adult-vaccination.

Journal Articles

Be sure to check out IAC's newest resource listing of more than 100 key medical journal articles about adult vaccination at www.immunize.org/journalarticles/peop_adults.asp.

And finally, stay up to date on adult vaccination by signing up to receive *Vaccinate Adults,* IAC's quarterly periodical on adult vaccination. We also suggest that you subscribe to our weekly email news service, *IAC Express.* Once you complete the sign-up form at www.immunize.org/subscribe, you'll start receiving weekly news and information via email about the latest news in immunization.

To receive "Question of the Week" by email, subscribe to *IAC Express,* the Immunization Action Coalition's e-news and information service at www.immunize.org/subscribe

Where in the world is IAC?

We have settled into our newly designed offices at the dynamic Court International building in a vibrant area of Saint Paul, Minnesota.

Please mark down our new address so you can come visit when you're in town:

Immunization Action Coalition
2550 University Avenue West
Suite 415 North
Saint Paul, MN 55114
(651) 647-9009

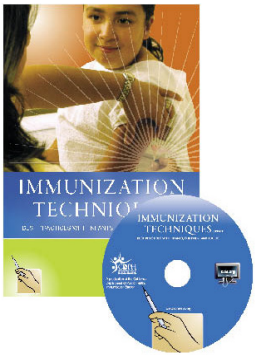
Wallet-sized immunization record cards for all ages: For adults, children & teens, and for a lifetime!

Now you can give any patient a permanent vaccination record card designed specifically for their age group: adult, child & teen, or lifetime. These brightly colored cards are printed on durable rip-, smudge-, and water-proof paper. To view the cards or for more details, go to www.immunize.org/shop and click on the images.

Buy 1 box (250 cards) for $45 (first order of a 250-card box comes with a 30-day, money-back guarantee). Discounts for larger orders: 2 boxes $40 each; 3 boxes $37.50 each; 4 boxes $34.50 each

To order, visit www.immunize.org/shop, or use the order form on page 24.
To receive sample cards, contact us: admininfo@immunize.org

"Immunization Techniques — Best Practices with Infants, Children, and Adults"



The California Department of Public Health, Immunization Branch, updated its award-winning training video, "Immunization Techniques: Best Practices with Infants, Children, and Adults." The 25-minute DVD can be used to train new employees and to refresh the skills of experienced staff on administering injectable, oral, and nasal-spray vaccines to children, teens, and adults. Make sure your healthcare setting has the 2010 edition!

The cost is $17 each for 1–9 copies; $10.25 each for 10–24 copies; $7 each for 25–49 copies; $5.75 each for 50–99 copies.

To order, visit www.immunize.org/shop, or use the order form on page 24.
For 100 or more copies, contact us for discount pricing: admininfo@immunize.org

For healthcare settings in California, contact your local health department immunization program for a free copy.

Vaccine Highlights

Recommendations, schedules, and more

Editor's note: The information in Vaccine Highlights is current as of October 21, 2014.

Next ACIP meetings

A committee of 15 national experts, the Advisory Committee on Immunization Practices (ACIP), advises CDC on the appropriate use of vaccines. ACIP meets three times a year in Atlanta; meetings are open to the public and available online via live webcast. The next meetings will be held on Oct. 29–30 and Feb. 25–26. For more information, visit www.cdc.gov/vaccines/acip.

ACIP periodically issues recommendations on the use of vaccines; they are published and readily available in the *Morbidity and Mortality Weekly Report (MMWR)*. Clinicians who vaccinate should have a current set for reference. Here are sources:

- Download from IAC's website at: www.immunize.org/acip.
- Download from CDC's website at: www.cdc.gov/vaccines/hcp/acip-recs.

In addition, extensive information on ACIP meetings is available at www.cdc.gov/vaccines/acip/meetings/meetings-info.html.

Pneumococcal vaccine news

On Sept. 19, CDC published "Use of 13-Valent Pneumococcal Conjugate Vaccine and 23-Valent Pneumococcal Polysaccharide Vaccine Among Adults Aged ≥65 Years: Recommendations of the ACIP" (*MMWR* 2014; 63[37]). At its special meeting on August 13, ACIP voted to recommend a dose of PCV13 (Prevnar 13, Pfizer) in series with PPSV 23 (Pneumovax, Merck) for all adults age 65 years and older. For detailed information, access the recommendations at www.cdc.gov/mmwr/pdf/wk/mm6337.pdf, pages 822–5.

Influenza vaccine news

On Aug. 19, CDC issued two updated influenza Vaccine Information Statements (VISs). The VIS for IIV is intended for use with all injectable formulations. The VIS for LAIV is intended for use when administering nasal-spray vaccine. Access the IIV VIS in English and 18 translations at www.immunize.org/vis/vis_flu_inactive.asp. The LAIV VIS and 17 translations are available at www.immunize.org/vis/vis_flu_live.asp.

HPV vaccine news

On Aug. 29, CDC published *Human Papillomavirus Vaccination: Recommendations of the ACIP* (*MMWR* 2014; 63[RR5]), a compendium of all current recommendations for the use of HPV vaccines. See www.cdc.gov/mmwr/pdf/rr/rr6305.pdf.

Zoster vaccine news

On Aug. 22, CDC published "Update on Recommendations for Use of Herpes Zoster Vaccine" (*MMWR* 2014; 63[33]), in which ACIP maintains its current recommendation that zoster vaccine be routinely recommended for adults age 60 years and older. Access the recommendations at www.cdc.gov/mmwr/pdf/wk/mm6333.pdf, pages 729–31.

Ebola news

On Aug. 6–7, the WHO director-general convened an Emergency Committee meeting regarding the 2014 Ebola virus disease outbreak in West Africa. It was the committee's unanimous view that the conditions for a Public Health Emergency of International Concern had been met. For updates on the Ebola outbreak, access CDC's website on Ebola information for healthcare providers at www.cdc.gov/vhf/ebola/hcp/index.html.

To find more than 1,000 "Ask the Experts" Q&As answered by CDC experts, visit
www.immunize.org/askexperts

To receive "Ask the Experts – Question of the Week" by email, subscribe to *IAC Express* at
www.immunize.org/subscribe

Current VIS dates

Check the dates on your supply of Vaccine Information Statements (VISs). If any are outdated, get current versions and VISs in more than 30 languages at www.immunize.org/vis.

Adenovirus	6/11/14	Meningococcal	10/14/11
Anthrax	3/10/10	Multi-vaccine	unavailable Expected mid-2014
Chickenpox	3/13/08		
DTaP	5/17/07	PCV13	2/27/13
Hib	2/4/14	PPSV	10/6/09
Hepatitis A	10/25/11	Polio	11/8/11
Hepatitis B	2/2/12	Rabies	10/6/09
HPV-Cervarix	5/3/11	Rotavirus	8/26/13
HPV-Gardasil	5/17/13	Shingles	10/6/09
Influenza	8/19/14	Td	2/4/14
Japanese enceph.	1/24/14	Tdap	5/9/13
MMR	4/20/12	Typhoid	5/29/12
MMRV	5/21/10	Yellow fever	3/30/11

For a ready-to-print version of this table for posting in your practice, go to www.immunize.org/catg.d/p2029.pdf.

Screening Checklist for Contraindications to Vaccines for Adults

Patient name: _____ Date of birth: ____/____/____ (mo.) (day) (yr.)

Screening Checklist for Contraindications to Vaccines for Adults

For patients: The following questions will help us determine which vaccines you may be given today. If you answer "yes" to any question, it does not necessarily mean you should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

	Yes	No	Don't Know
1. Are you sick today?	☐	☐	☐
2. Do you have allergies to medications, food, a vaccine component, or latex?	☐	☐	☐
3. Have you ever had a serious reaction after receiving a vaccination?	☐	☐	☐
4. Do you have a long-term health problem with heart disease, lung disease, asthma, kidney disease, metabolic disease (e.g., diabetes), anemia, or other blood disorder?	☐	☐	☐
5. Do you have cancer, leukemia, HIV/AIDS, or any other immune system problem?	☐	☐	☐
6. In the past 3 months, have you taken medications that weaken your immune system, such as cortisone, prednisone, other steroids, or anticancer drugs, or have you had radiation treatments?	☐	☐	☐
7. Have you had a seizure or a brain or other nervous system problem?	☐	☐	☐
8. During the past year, have you received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug?	☐	☐	☐
9. For women: Are you pregnant or is there a chance you could become pregnant during the next month?	☐	☐	☐
10. Have you received any vaccinations in the past 4 weeks?	☐	☐	☐

Form completed by: _____ Date: _____

Form reviewed by: _____ Date: _____

Did you bring your immunization record card with you? **yes** ☐ **no** ☐

It is important for you to have a personal record of your vaccinations. If you don't have a personal record, ask your healthcare provider to give you one. Keep this record in a safe place and bring it with you every time you seek medical care. Make sure your healthcare provider records all your vaccinations on it.

Technical content reviewed by the Centers for Disease Control and Prevention

Immunization Action Coalition Saint Paul, Minnesota • 651-647-9009 • www.immunize.org • www.vaccineinformation.org

www.immunize.org/catg.d/p4065.pdf • Item #P4065 (9/14)

For a ready-to-copy 8½ x 11" version of this 2-page piece, visit www.immunize.org/catg.d/p4065.pdf

This checklist covers precautions and contraindications to vaccination.

Ask your patients to complete the checklist on page 1. Page 2 is not for patients, it is reference material for you.

bout the Screening Checklist for Contraindications To Vaccines for Adults

ded a certain question on the screening checklist? If so, read the information onsult the references listed at the bottom of this page.

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ns, including asthma
LAIV.

5. Do you have cancer, leukemia, HIV/AIDS, or any other immune system problem? *[LAIV, MMR, VAR, ZOS]*
Live virus vaccines (e.g., LAIV, measles-mumps-rubella [MMR], varicella [VAR], zoster [ZOS]) are usually contraindicated in immunocompromised people. However, there are exceptions. For example, MMR vaccine is recommended and varicella vaccine should be considered for adults with CD4+ T-lymphocyte counts of greater than or equal to 200 cells/μL. Immunosuppressed people should not receive LAIV. For details, consult the ACIP recommendations (3, 4, 5).

6. In the past 3 months, have you taken medications that weaken your immune system, such as cortisone, prednisone, other steroids, or anticancer drugs, or have you had radiation treatments? *[LAIV, MMR, VAR, ZOS]*
Live virus vaccines (e.g., LAIV, MMR, VAR, ZOS) should be postponed until after chemotherapy or long-term high-dose steroid therapy has ended. For details and length of time to postpone, consult the ACIP statement (1, 3). To find specific vaccination schedules for stem cell transplant (bone marrow transplant) patients, see reference 6. LAIV can be given only to healthy non-pregnant people younger than age 50 years.

7. Have you had a seizure or a brain or other nervous system problem? *[Influenza, Td/Tdap]*
Tdap is contraindicated in people who have a history of encephalopathy within 7 days following DTP/DTaP given before age 7 years. An unstable progressive neurologic problem is a precaution to the use of Tdap. For people with stable neurologic disorders (including seizures) unrelated to vaccination, or for people with a family history of seizure, vaccinate as usual. A history of Guillain-Barré syndrome (GBS) is a consideration with the following: 1) Td/Tdap: if GBS has occurred within 6 weeks of a tetanus-containing vaccine and decision is made to continue vaccination, give Tdap instead of Td if no history of prior Tdap; 2) Influenza vaccine (IIV/LAIV): if GBS has occurred within 6 weeks of a prior influenza vaccine, vaccinate with IIV if at high risk for severe influenza complications.

8. During the past year, have you received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug? *[LAIV, MMR, VAR]*
Certain live virus vaccines (e.g., LAIV, MMR, VAR, ZOS) may need to be deferred, depending on several variables. Consult the most current ACIP recommendations for current information on intervals between antiviral drugs, immune globulin or blood product administration and live virus vaccines. (1)

9. For women: Are you pregnant or is there a chance you could become pregnant during the next month? *[MMR, LAIV, VAR, ZOS]*
Live virus vaccines (e.g., MMR, VAR, ZOS, LAIV) are contraindicated one month before and during pregnancy because of the theoretical risk of virus transmission to the fetus. Sexually active women in their childbearing years who receive live virus vaccines should be instructed to practice careful contraception for one month following receipt of the vaccine. On theoretical grounds, inactivated poliovirus vaccine should not be given during pregnancy; however, it may be given if risk of exposure is imminent and immediate protection is needed (e.g., travel to endemic areas). Use of Td or Tdap is not contraindicated in pregnancy. At the provider's discretion, either vaccine may be administered during the 2nd or 3rd trimester. (1, 3, 4, 5, 7, 8)

10. Have you received any vaccinations in the past 4 weeks? *[LAIV, MMR, VAR, yellow fever]*
People who were given either LAIV or an injectable live virus vaccine (e.g., MMR, VAR, ZOS, yellow fever) should wait 28 days before receiving another vaccination of this type. Inactivated vaccines may be given at any spacing interval if they are not administered simultaneously.

References:

1. CDC. General recommendations on immunization, at www.cdc.gov/vaccines/pubs/acip-list.htm
2. Table of Vaccine Components: www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.
3. CDC. Prevention and control of seasonal influenza with vaccines: Recommendations of the ACIP—2014–2015 Influenza Season at www.cdc.gov/mmwr/pdf/wk/mm6332.pdf, pages 691–7.
4. CDC. Measles, mumps, and rubella—vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps. *MMWR* 1998; 47 (RR-8).
5. CDC. Prevention of varicella: Recommendations of the Advisory Committee on Immunization Practices. *MMWR* 2007; 56 (RR-4).
6. Tomblyn M, Einsele H, et al. Guidelines for preventing infectious complications among hematopoietic stem cell transplant recipients: a global perspective. *Biol Blood Marrow Transplant* 15:1143–1238; 2009 at www.cdc.gov/vaccines/pubs/hemato-cell-transplts.htm.
7. CDC. Notice to readers: Revised ACIP recommendation for avoiding pregnancy after receiving a rubella-containing vaccine. *MMWR* 2001; 50 (49).
8. CDC. Prevention of pertussis, tetanus, and diphtheria among pregnant and postpartum women and their infants: Recommendations of the ACIP. *MMWR* 2008; 57 (RR-4).

Using Standing Orders for Administering Vaccines: What You Should Know

The use of standing orders for vaccination facilitates the delivery of immunization services to patients in clinics, hospitals, and community settings.

Standing orders have been shown to increase vaccination coverage rates.

▼ Go to **www.immunize.org/standing-orders** for the most current versions of sample standing orders

What are standing orders?

Standing orders authorize nurses, pharmacists, and other appropriately trained healthcare personnel, where allowed by state law, to assess a patient's immunization status and administer vaccinations according to a protocol approved by an institution, physician, or other authorized practitioner. The standing orders work by enabling assessment and vaccination of the patient without the need for clinician examination or direct order from the attending provider at the time of the interaction. Standing orders can be established for the administration of one or more specific vaccines to a broad or narrow set of patients in healthcare settings such as clinics, hospitals, pharmacies, and long-term care facilities.

Who recommends standing orders for vaccination?

The Community Preventive Services Task Force (Task Force): The Task Force[1] recommends standing orders for vaccinations based on strong evidence of effectiveness in improving vaccination rates:

1. in adults and children,
2. when used alone or when combined with additional interventions, and
3. across a range of settings and populations.

Read the full Task Force Finding and Rationale Statement at www.thecommunityguide.org/vaccines/standingorders.html

The Centers for Disease Control and Prevention (CDC): CDC's Advisory Committee on Immunization Practices (ACIP) specifically recommends standing orders for influenza and pneumococcal vaccinations and several other vaccines (e.g., hepatitis B, varicella). See *Use of Standing Orders Programs to Increase Adult Vaccination Rates: Recommendations of the ACIP. MMWR* 2000;49 (No. RR-1) at www.cdc.gov/mmwr/preview/mmwrhtml/rr4901a2.htm.

What are the elements of a standing order?

A comprehensive standing order should include the following elements:

1. who is targeted to receive the vaccine;
2. how to determine if a patient needs or should receive a particular vaccination (e.g., indications, contraindications, and precautions);
3. procedures for administering the vaccine (e.g., vaccine name, schedule for vaccination, appropriate needle size, vaccine dosage, route of administration);
4. provision of any federally required information (e.g., Vaccine Information Statement);
5. how to document vaccination in the patient record;
6. a protocol for the management of any medical emergency related to the administration of the vaccine; and
7. how to report possible adverse events occurring after vaccination.

Who is authorized to administer vaccines under standing orders?

Each of the 50 states separately regulates the practice of medicine, nursing, pharmacy, and other health-related practitioners. For further information about who can carry out standing orders in your state, contact your state immunization program or the appropriate state body (e.g., state board of medical/nursing/pharmacy practice).

Who is authorized to sign the standing order?

In general, standing orders are approved by an institution, physician, or authorized practitioner. State law or regulatory agency might authorize other healthcare professionals to sign standing orders.

What should be done with the standing orders after they have been signed?

Signed standing orders should be kept with all other signed medical procedures and protocols that are operational in one's clinic setting. A copy should also be available for clinic staff who operate under those standing orders.

Do standing orders need to be renewed (e.g., yearly)?

Generally, standing orders will include an implementation date as well as an expiration date. Periodic review of standing orders is important, because vaccine recommendations may change over time.

Where can I find sample standing orders?

The Immunization Action Coalition has developed templates of standing orders for vaccines that are routinely recommended to children and adults. They are updated as needed and reviewed for technical accuracy by immunization experts at CDC. The most current versions can be accessed by going to www.immunize.org/standing-orders.

FOOTNOTE

1 The Task Force was established in 1996 by the U.S. Department of Health and Human Services to identify population health interventions that are scientifically proven to save lives, increase lifespans, and improve quality of life. The Task Force produces recommendations (and identifies evidence gaps) to help inform the decision making of federal, state, and local health departments, other government agencies, communities, healthcare providers, employers, schools, and research organizations. For more infor-mation, see www.thecommunityguide.org/index.html.

Medical Management of Vaccine Reactions in Adult Patients

Medical Management of Vaccine Reactions in Adult Patients

All vaccines have the potential to cause an adverse reaction. In order to minimize adverse reactions, patients should be carefully screened for precautions and contraindications before vaccine is administered. Even with careful screening, reactions may occur. These reactions can vary from trivial and inconvenient (e.g., soreness, itching) to severe and life threatening (e.g., anaphylaxis). If reactions occur, staff should be prepared with procedures for their management. The table below describes procedures to follow if various reactions occur.

REACTION	SYMPTOMS	MANAGEMENT
Localized	Soreness, redness, itching, or swelling at the injection site	Apply a cold compress to the injection site. Consider giving an analgesic (pain reliever) or antipruritic (anti-itch) medication.
	Slight bleeding	Apply an adhesive compress over the injection site.
	Continuous bleeding	Place thick layer of gauze pads over site and maintain direct and firm pressure; raise the bleeding injection site (e.g., arm) above the level of the patient's heart.
Psychological fright and syncope (fainting)	Fright before injection is given	Have patient sit or lie down for the vaccination.
	Extreme paleness, sweating, coldness of the hands and feet, nausea, lightheadedness, dizziness, weakness, or visual disturbances	Have patient lie flat or sit with head between knees for several minutes. Loosen any tight clothing and maintain an open airway. Apply cool, damp cloths to patient's face and neck.
	Fall, without loss of consciousness	Examine the patient to de present before attempting Place patient flat on back
	Loss of consciousness	Check the patient to deter before attempting to mov patient flat on back with f patient does not recover i
Anaphylaxis	Sudden or gradual onset of generalized itching, erythema (redness), or urticaria (hives); angioedema (swelling of the lips, face, or throat); severe bronchospasm (wheezing); shortness of breath; shock; abdominal cramping; or cardiovascular collapse.	See "Emergency Medical ment of Anaphylactic Rea next page for detailed step anaphylaxis.

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Visit www.immunize.org/catg.d/p3082.pdf

Table describes procedures you can follow if various reactions occur.

Emergency medical protocol and supplies list are ready for your use.

Needed medications for a community immunization clinic

FIRST-LINE medication

- ☐ **Epinephrine**, aqueous 1:1000 (i.e., 1 mg/mL) dilution, in ampules, vials of solution, or prefilled syringes, including epinephrine autoinjectors (e.g., EpiPen and Auvi-Q). If autoinjectors are stocked, at least three should be available.

Optional medication: H_1 antihistamines

- ☐ Diphenhydramine (e.g., Benadryl) oral (12.5 mg/5 mL liquid, 25 or 50 mg capsules/tablets) or injectable (50 mg/mL solution).
- ☐ Hydroxyzine (e.g., Atarax, Vistaril) oral (10 mg/5 mL or 25 mg/5 mL liquid, 25 mg capsules).

Needed supplies for a community immunization clinic

- ☐ Syringes (1 and 3 cc) and needles (22 and 25 g, 1", 1½", and 2") for epinephrine, diphenhydramine, or hydroxyzine. For ampules, use filtered needles.
- ☐ Alcohol wipes
- ☐ Tourniquet
- ☐ Adult airways (small, medium, and large)
- ☐ Adult size pocket mask with one-way valve
- ☐ Oxygen (if available)
- ☐ Stethoscope
- ☐ Sphygmomanometer (blood pressure measuring device) with adult-size and extra-large cuffs
- ☐ Tongue depressors
- ☐ Flashlight with extra batteries (for examination of the mouth and throat)
- ☐ Wristwatch with a second hand or other timing device
- ☐ Cell phone or access to onsite phone

Emergency medical protocol for management of anaphylactic reactions in adults

1. If itching and swelling are confined to the injection site where the vaccination was given, observe patient closely for the development of generalized symptoms.
2. If symptoms are generalized, activate the emergency medical system (EMS; e.g., call 911) and notify the patient's physician. This should be done by a second person, while the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient.
3. **DRUG DOSING INFORMATION: The first-line and most important therapy in anaphylaxis is epinephrine. There are NO contraindications to epinephrine in the setting of anaphylaxis.**
   a. **First-line treatment:** Administer aqueous **epinephrine** 1:1000 dilution intramuscularly, 0.01 mL/kg/dose (adult dose ranges from 0.3 mL to 0.5 mL, with maximum single dose of 0.5 mL).
   b. **Optional treatment: H_1 antihistamines** for hives or itching; you may also administer **diphenhydramine** (either orally or by intramuscular injection; the standard dose is 1–2 mg/kg every 4–6 hrs, up to 50 mg maximum single dose) or **hydroxyzine** (standard oral dose is 0.5–1 mg/kg every 4–6 hrs up to 100 mg maximum single dose).
4. Monitor the patient closely until EMS arrives. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain airway. Keep patient in supine position (flat on back) unless he or she is having breathing difficulty. If breathing is difficult, patient's head may be elevated, provided blood pressure is adequate to prevent loss of consciousness. If blood pressure is low, elevate legs. Monitor blood pressure and pulse every 5 minutes.
5. If EMS has not arrived and symptoms are still present, repeat dose of epinephrine every 5–15 minutes for up to 3 doses, depending on patient's response.
6. Record all vital signs, medications administered to the patient, including the time, dosage, response, and the name of the medical personnel who administered the medication, and other relevant clinical information.
7. Notify the patient's primary care physician.

REFERENCES

Simons FE, Camargo CA. Anaphylaxis: Rapid recognition and treatment. In: UpToDate, Bochner BS (Ed). UpToDate: Waltham, MA, 2013.

Boyce JA, Assa'ad A, Burks AW, et al. Guidelines for the Diagnosis and Management of Food Allergy in the United States: Report of the NIAID-Sponsored Expert Panel. *Allergy Clin Immunol* 2010; 126(6): S1–S57.

These standing orders for the medical management of vaccine reactions in adult patients shall remain in effect for patients of the _____ until rescinded or until _____
NAME OF CLINIC DATE

_____ _____
MEDICAL DIRECTOR'S SIGNATURE DATE OF SIGNING

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Foodborne Hepatitis A Outbreaks in the U.S. Are Well-documented; Vaccine Provides Lifetime Protection

Hepatitis A can be spread by exposure to fecal material, through household or sexual contact with an infected person or by consuming hepatitis A virus-contaminated food or water. People who get infected with the hepatitis A virus can become extremely ill, and sometimes die of fulminant (overwhelming) infection.

The Centers for Disease Control and Prevention operates a reporting system for foodborne outbreaks due to bacteria, viruses, fungi, parasites, and chemical and toxin contamination. Summary information about these outbreaks is available from the Foodborne Outbreak Online Database.* This database includes startling information about foodborne hepatitis A outbreaks in the United States from 1997 through 2011.

Summary of hepatitis A outbreaks

- Total number of foodborne hepatitis A outbreaks, 1998–2011: 81 (average of 6 outbreaks per year, range 1 to 12 outbreaks per year)
- Total number of outbreak-associated illnesses: 2,202† (average of 28 illnesses per outbreak)
- Number of states reporting foodborne hepatitis A outbreaks: 27 (2 outbreaks involved more than 1 state)
- Largest outbreaks: Pennsylvania, 2003 (565 cases‡), and Georgia, 2003 (297 cases§)
- Outbreak-associated hospitalizations: 290
- Outbreak-associated deaths: 8
- Most common food products implicated in hepatitis A transmission: vegetables (often salads) and fruit. Fresh produce can become contaminated during cultivating, harvesting, processing, or distribution. Many other types of food were also implicated in outbreaks, including seafood, ice, milk products, and sandwiches.
- Most common setting of outbreaks: restaurants (including fast food and sit-down types), private homes, workplaces, picnics, and schools. Most reported hepatitis A foodborne outbreaks have been related to hepatitis A-infected food handlers.

Three outbreaks illustrate the potential magnitude of foodborne hepatitis A outbreaks

- In 2013, at least 162 people in 10 states became ill with hepatitis A after consuming products containing pomegranate seeds from Turkey. At least 71 people were hospitalized. It has not yet been determined how the pomegranate seeds became contaminated with hepatitis A virus.**
- Beginning in late August 2005, at least 10 clusters of hepatitis A illnesses, totaling 39 people, occurred in 4 states among restaurant patrons who ate raw oysters. Hepatitis A virus was detected in multiple recalled samples, indicating that as many as 1 in every 15 oysters from this source was contaminated.††
- In 1997, a multi-state outbreak of hepatitis A was associated with consumption of frozen strawberries. The outbreak involved 242 persons from five states and included children from 36 schools.‡‡

Foodborne outbreaks of hepatitis A are unpredictable. They can be caused by many different types of food (particularly foods eaten raw or minimally cooked) and in any food service setting. These outbreaks can result in serious illness, hospitalization, and death. Unlike most other types of foodborne illnesses, those caused by hepatitis A virus can be prevented by vaccination. Two doses of hepatitis A vaccine separated by 6 months can provide lifelong protection against this dangerous virus infection.

SOURCES

* Available at wwwn.cdc.gov/foodborneoutbreaks. Accessed June 4, 2014.

† The 2002 reported outbreak-associated illnesses underestimates the true number of infections since many people (particularly children) infected with hepatitis A will not have symptoms and may not be reported as part of an outbreak.

‡ The 2003 Pennsylvania outbreak was traced to green onions served in a single chain restaurant's salsa. The green onions were grown in Mexico and had most likely been contaminated during growing, harvesting, packing, or distribution; green onions require extensive handling and their surface is complex and vulnerable to contamination.

§ Green onions were also implicated in the Georgia outbreak. Molecular epidemiology indicated the source of the contaminated produce to the same area in northern Mexico as the Pennsylvania outbreak.

** Available at www.cdc.gov/hepatitis/Outbreaks/2013/A1b-03-31. Accessed June 4, 2014.

†† Shieh YC, Khudyakov YE, Xia G, et al. Molecular confirmation of oysters as the vector for hepatitis A in a 2005 multistate outbreak. J Food Prot 2007; 70(1):145–50.

‡‡ Hutin YJ, Pool V, Cramer EH, et al. A multi-state, foodborne outbreak of hepatitis A. N Engl J Medicine 1999 Feb 25; 340(8):595-602.

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www.immunize.org/catg.d/p2104.pdf • Item #P2104 (7/14)

NEW! Handouts about Hepatitis A Vaccinations for Your Patients

Hepatitis A Vaccine: Reasons to Consider Vaccination

Hepatitis A is a serious liver disease caused by infection with hepatitis A virus

- Hepatitis A virus is found in the feces (poop) of people who are infected with the virus. It is usually spread by getting invisible particles of hepatitis A virus-contaminated feces in your mouth.
- The most common way for you to get infected is through close personal contact, such as living with a person infected with hepatitis A virus or having sex with an infected person. You can also get infected if you travel abroad where sanitation practices may not be adequate. This might happen when you eat hepatitis A virus-contaminated food or drink hepatitis A virus-contaminated water only – and it can even happen in four-star restaurants in the United States.

You can feel quite sick when you're infected with hepatitis A and some people die

- If you have symptoms, they usually come on suddenly and can include fever, tiredness, loss of appetite, nausea, belly pain, cola-colored urine, and yellowing of the skin and eyes.
- The illness usually lasts several weeks, but you might feel sick for as long as six months.
- There is no medicine to treat you for hepatitis A – only supportive care is available.
- Safe, effective hepatitis A vaccines have been available since 1995.

Consider your answers to the following questions

Is all the food you eat as clean and safe as you think it is?

- Hepatitis A virus can spread when an infected food handler contaminates your food. This can happen if the food handler uses the toilet and does not wash his or her hands well before touching your food. Food can also become contaminated with hepatitis A virus during growing, harvesting, or processing.
- Your food can be contaminated in four-star restaurants, bars, catered events, schools, or even at home.
- More than 550 persons got hepatitis A after eating at a single chain restaurant in Pennsylvania. Three persons

died from liver failure. The outbreak
onions from Mexico that had been
hepatitis A virus during growing, ha
distribution.

- Investigators linked 64 cases of hep
chased at a retail buyer's club wher
infected baker contaminated baked
sugar glaze.
- 91 people were infected with hepatit
ing various events in Kentucky cate
employing a food handler who was
A virus.
- 262 persons in five states, including
36 schools, ate contaminated straw
infected with hepatitis A virus.

**Is all the water and ice you drink as cl
think it is?**

- Food and beverage handlers in bars
catered events who are infected wit
and don't wash their hands can cor
ages, especially those containing ic

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www.immunize.org/catg.d/p2

These handouts describe how easy it is to get infected with the hepatitis A virus through contaminated food or drink. These pieces clearly make the case that such outbreaks are unpredictable, potentially serious, and preventable by vaccination.

Hepatitis A Is a Serious Liver Disease

VACCINATION CAN PROTECT YOU!

What is hepatitis A?

Hepatitis A is a serious liver disease caused by infection with the hepatitis A virus.

How is hepatitis A virus spread?

Hepatitis A virus is usually spread from getting particles of fecal material (poop) into your mouth that are too small to be seen. This can happen through household or sexual contact with an infected person or by eating hepatitis A virus-contaminated food or drinking hepatitis A virus-contaminated water. Casual contact, such as in a school or work setting, has not been known to spread hepatitis A virus.

What are the symptoms of hepatitis A virus infection?

Infected people can have no symptoms at all or be extremely ill. Only 30% of children less than six years of age develop symptoms, while 70% of older children and adults develop symptoms.

If a person does develop symptoms, they might include fever, tiredness, loss of appetite, nausea, abdominal pain, dark urine, or jaundice (yellowing of the eyes and skin). These symptoms can last up to six months. Even without symptoms, people infected with hepatitis A virus can spread the infection to others.

How serious is hepatitis A virus infection?

About 30% of people with hepatitis A virus require hospitalization. Adults who become ill often miss several weeks of work. Although deaths due to hepatitis A virus are uncommon, death still can occur from overwhelming hepatitis A virus infection that causes liver failure.

How can hepatitis A virus infection be prevented?

Safe and effective vaccines to prevent hepatitis A virus infection have been available in the U.S. since 1995. Good hand washing will also help reduce the spread of hepatitis A virus. Always wash your hands with soap and water after using the toilet, changing a diaper, and before preparing or eating food.

Who should get hepatitis A vaccine?

The following groups of people should get vaccinated against hepatitis A virus:

- Any person who wishes to be protected from hepatitis A virus infection
- All children who are 12 to 23 months of age
- Men who have sex with men
- Users of street drugs (injecting and non-injecting)
- People who travel or work in any area of the world except the U.S., Canada, Western Europe, Japan, New Zealand, and Australia
- People who will have close personal contact with an international adoptee from a country where hepatitis A virus infection is common (all countries except the U.S., Canada, Western Europe, Japan, New Zealand, and Australia) during the first 60 days following the adoptee's arrival in the U.S.
- People with chronic liver disease, including hepatitis C
- People working with hepatitis A virus in a laboratory
- People with clotting factor disorders (such as hemophilia)
- People who have been exposed to hepatitis A virus in the past 2 weeks

For families considering international adoption, who should receive hepatitis A vaccine?

People who anticipate having close personal contact (such as household contact or regular babysitting) with an international adoptee from a country where hepatitis A virus infection is common (all countries except the U.S., Canada, Western Europe, Japan, New Zealand, and Australia) during the first 60 days following the adoptee's arrival in the U.S. should get the vaccine. In addition to the adoptee's new parents and siblings, this group could include grandparents and other members of the extended family, caregivers, and healthcare providers. Ideally, the first dose of hepatitis A vaccine should be given to close contacts as soon as adoption is planned but no later than 2 weeks prior to the arrival of the adoptee. A second dose should be given no sooner than 6 months after the first dose.

CONTINUED ON THE NEXT PAGE ▶

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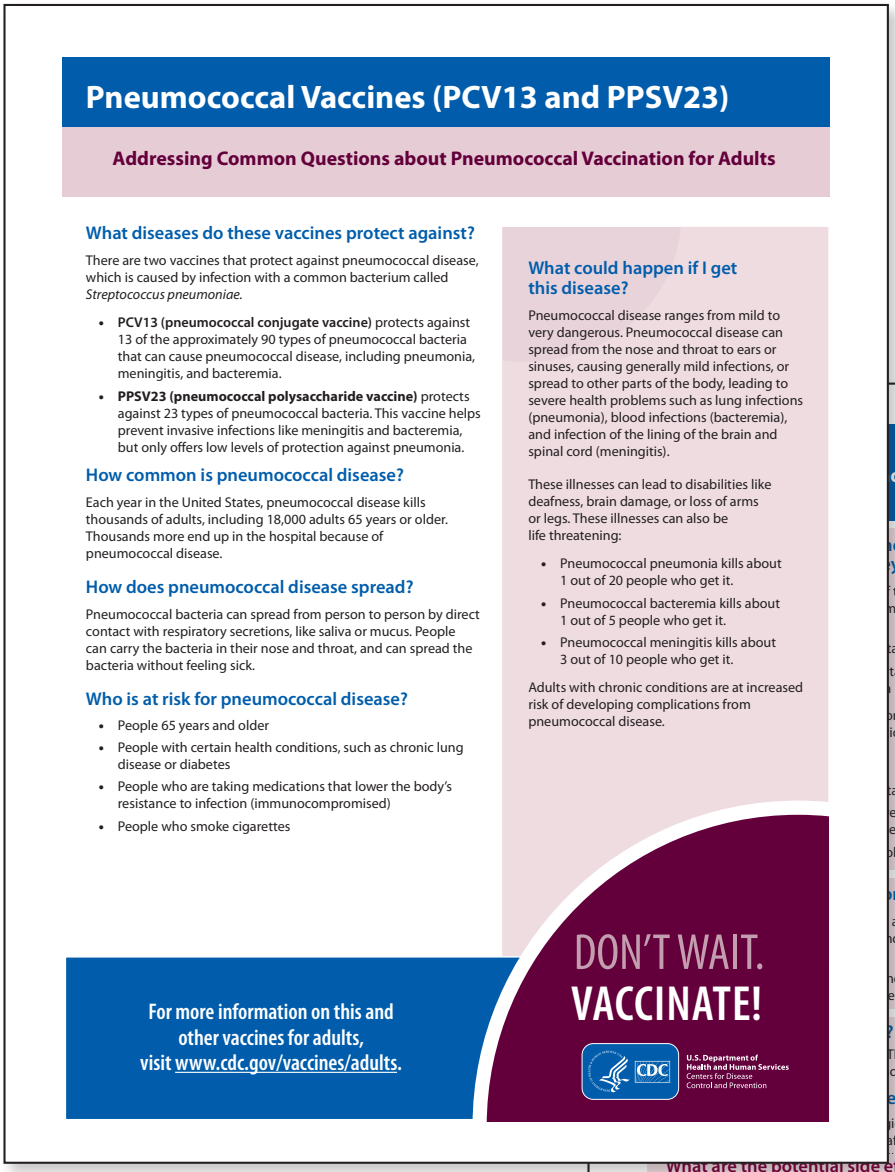
www.immunize.org/catg.d/p4080.pdf • Item #P4080 (7/14)

For ready-to-copy 8½ x 11" versions of these 2-page pieces, visit

www.immunize.org/catg.d/p2103.pdf

www.immunize.org/catg.d/p4080.pdf

CDC Creates Fact Sheet about Pneumococcal Vaccines for Older Adults



Pneumococcal Vaccines (PCV13 and PPSV23)

Addressing Common Questions about Pneumococcal Vaccination for Adults

What diseases do these vaccines protect against?

There are two vaccines that protect against pneumococcal disease, which is caused by infection with a common bacterium called *Streptococcus pneumoniae.*

- **PCV13 (pneumococcal conjugate vaccine)** protects against 13 of the approximately 90 types of pneumococcal bacteria that can cause pneumococcal disease, including pneumonia, meningitis, and bacteremia.
- **PPSV23 (pneumococcal polysaccharide vaccine)** protects against 23 types of pneumococcal bacteria. This vaccine helps prevent invasive infections like meningitis and bacteremia, but only offers low levels of protection against pneumonia.

How common is pneumococcal disease?

Each year in the United States, pneumococcal disease kills thousands of adults, including 18,000 adults 65 years or older. Thousands more end up in the hospital because of pneumococcal disease.

How does pneumococcal disease spread?

Pneumococcal bacteria can spread from person to person by direct contact with respiratory secretions, like saliva or mucus. People can carry the bacteria in their nose and throat, and can spread the bacteria without feeling sick.

Who is at risk for pneumococcal disease?

- People 65 years and older
- People with certain health conditions, such as chronic lung disease or diabetes
- People who are taking medications that lower the body's resistance to infection (immunocompromised)
- People who smoke cigarettes

What could happen if I get this disease?

Pneumococcal disease ranges from mild to very dangerous. Pneumococcal disease can spread from the nose and throat to ears or sinuses, causing generally mild infections, or spread to other parts of the body, leading to severe health problems such as lung infections (pneumonia), blood infections (bacteremia), and infection of the lining of the brain and spinal cord (meningitis).

These illnesses can lead to disabilities like deafness, brain damage, or loss of arms or legs. These illnesses can also be life threatening:

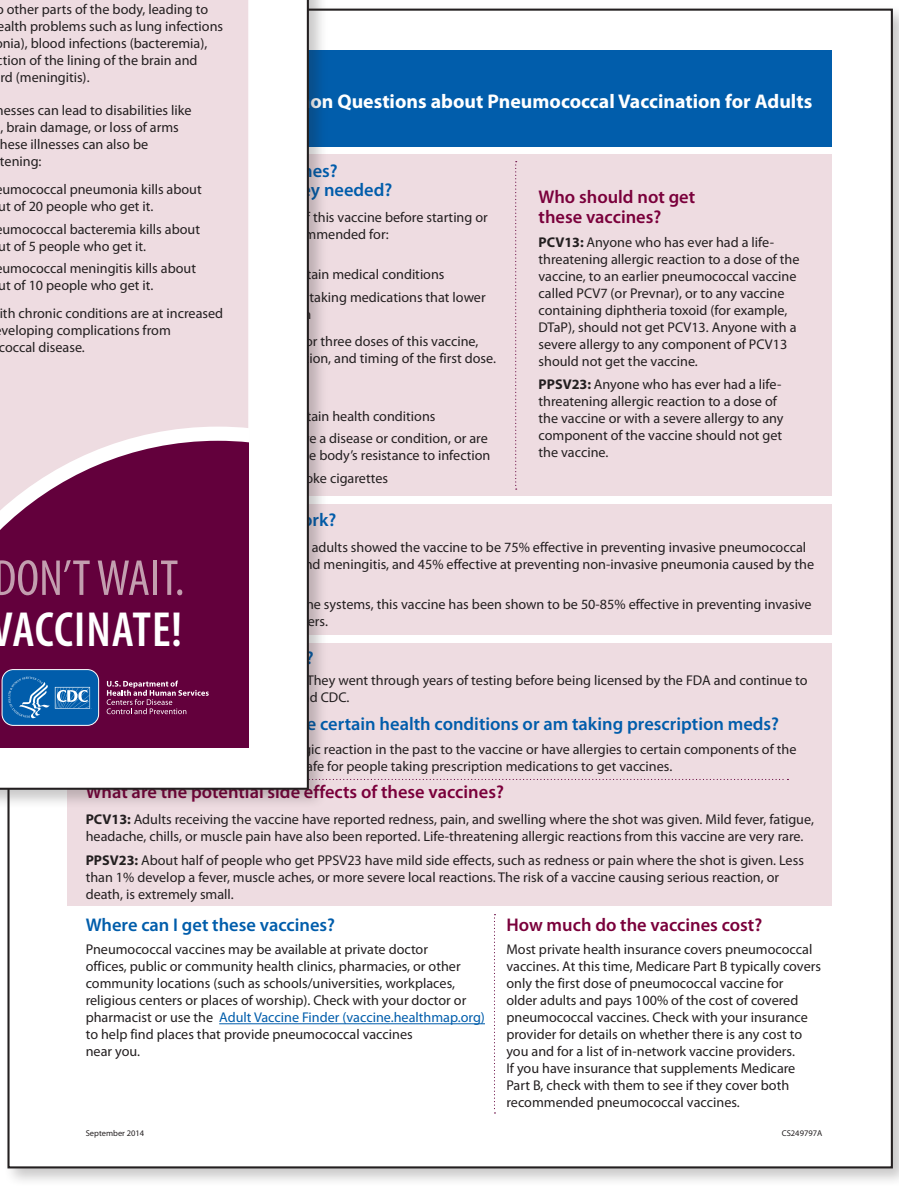
- Pneumococcal pneumonia kills about 1 out of 20 people who get it.
- Pneumococcal bacteremia kills about 1 out of 5 people who get it.
- Pneumococcal meningitis kills about 3 out of 10 people who get it.

Adults with chronic conditions are at increased risk of developing complications from pneumococcal disease.

For more information on this and other vaccines for adults, visit www.cdc.gov/vaccines/adults.

DON'T WAIT. VACCINATE!

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention



on Questions about Pneumococcal Vaccination for Adults

...es?
...y needed?
...this vaccine before starting or ...mmended for:
...tain medical conditions
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...or three doses of this vaccine, ...ion, and timing of the first dose.
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...oke cigarettes

Who should not get these vaccines?

PCV13: Anyone who has ever had a life-threatening allergic reaction to a dose of the vaccine, to an earlier pneumococcal vaccine called PCV7 (or Prevnar), or to any vaccine containing diphtheria toxoid (for example, DTaP), should not get PCV13. Anyone with a severe allergy to any component of PCV13 should not get the vaccine.

PPSV23: Anyone who has ever had a life-threatening allergic reaction to a dose of the vaccine or with a severe allergy to any component of the vaccine should not get the vaccine.

...ork?
...adults showed the vaccine to be 75% effective in preventing invasive pneumococcal ...nd meningitis, and 45% effective at preventing non-invasive pneumonia caused by the ...
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...e certain health conditions or am taking prescription meds?
...gic reaction in the past to the vaccine or have allergies to certain components of the ...afe for people taking prescription medications to get vaccines.

What are the potential side effects of these vaccines?

PCV13: Adults receiving the vaccine have reported redness, pain, and swelling where the shot was given. Mild fever, fatigue, headache, chills, or muscle pain have also been reported. Life-threatening allergic reactions from this vaccine are very rare.

PPSV23: About half of people who get PPSV23 have mild side effects, such as redness or pain where the shot is given. Less than 1% develop a fever, muscle aches, or more severe local reactions. The risk of a vaccine causing serious reaction, or death, is extremely small.

Where can I get these vaccines?

Pneumococcal vaccines may be available at private doctor offices, public or community health clinics, pharmacies, or other community locations (such as schools/universities, workplaces, religious centers or places of worship). Check with your doctor or pharmacist or use the Adult Vaccine Finder (vaccine.healthmap.org) to help find places that provide pneumococcal vaccines near you.

How much do the vaccines cost?

Most private health insurance covers pneumococcal vaccines. At this time, Medicare Part B typically covers only the first dose of pneumococcal vaccine for older adults and pays 100% of the cost of covered pneumococcal vaccines. Check with your insurance provider for details on whether there is any cost to you and for a list of in-network vaccine providers. If you have insurance that supplements Medicare Part B, check with them to see if they cover both recommended pneumococcal vaccines.

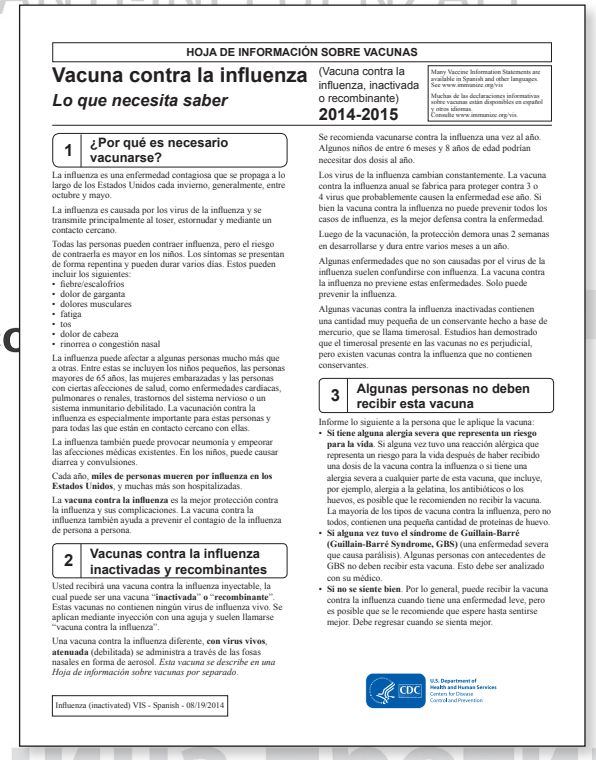
September 2014 CS249797A

Make copies and give them to your patients!

Visit www.cdc.gov/vaccines/hcp/patient-ed/adults/downloads/fs-pneumo-hcp.pdf

2014–2015 Influenza Vaccine Information Statements Are Available in Many Languages!

VACCINO ANTI-INFLUENZALE



HOJA DE INFORMACIÓN SOBRE VACUNAS

Vacuna contra la influenza (Vacuna contra la influenza, inactivada o recombinante)

Lo que necesita saber

2014-2015

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis

Muchas de las declaraciones informativas sobre vacunas están disponibles en español y otros idiomas. Consulte www.immunize.org/vis

1 ¿Por qué es necesario vacunarse?

La influenza es una enfermedad contagiosa que se propaga a lo largo de los Estados Unidos cada invierno, generalmente, entre octubre y mayo.

La influenza es causada por los virus de la influenza y se transmite principalmente al toser, estornudar y mediante un contacto cercano.

Todas las personas pueden contraer influenza, pero el riesgo de contraerla es mayor en los niños. Los síntomas se presentan de forma repentina y pueden durar varios días. Estos pueden incluir los siguientes:

- fiebre/escalofríos
- dolor de garganta
- dolores musculares
- fatiga
- tos
- dolor de cabeza
- rinorrea o congestión nasal

La influenza puede afectar a algunas personas mucho más que a otras. Entre estas se incluyen los niños pequeños, las personas mayores de 65 años, las mujeres embarazadas y las personas con ciertas afecciones de salud, como enfermedades cardíacas, pulmonares o renales, trastornos del sistema nervioso o un sistema inmunitario debilitado. La vacunación contra la influenza es especialmente importante para estas personas y para todas las que están en contacto cercano con ellas.

La influenza también puede provocar neumonía y empeorar las afecciones médicas existentes. En los niños, puede causar diarrea y convulsiones.

Cada año, **miles de personas mueren por influenza en los Estados Unidos**, y muchas más son hospitalizadas.

La **vacuna contra la influenza** es la mejor protección contra la influenza y sus complicaciones. La vacuna contra la influenza también ayuda a prevenir el contagio de la influenza de persona a persona.

2 Vacunas contra la influenza inactivadas y recombinantes

Usted recibirá una vacuna contra la influenza inyectable, la cual puede ser una vacuna "**inactivada**" o "**recombinante**". Estas vacunas no contienen ningún virus de influenza vivo. Se aplican mediante inyección con una aguja y suelen llamarse "vacuna contra la influenza".

Una vacuna contra la influenza diferente, **con virus vivos**, **atenuada** (debilitada) se administra a través de las fosas nasales en forma de aerosol. *Esta vacuna se describe en una Hoja de información sobre vacunas por separado.*

Se recomienda vacunarse contra la influenza una vez al año. Algunos niños de entre 6 meses y 8 años de edad podrían necesitar dos dosis al año.

Los virus de la influenza cambian constantemente. La vacuna contra la influenza anual se fabrica para proteger contra 3 o 4 virus que probablemente causen la enfermedad ese año. Si bien la vacuna contra la influenza no puede prevenir todos los casos de influenza, es la mejor defensa contra la enfermedad.

Luego de la vacunación, la protección demora unas 2 semanas en desarrollarse y dura entre varios meses a un año.

Algunas enfermedades que no son causadas por el virus de la influenza suelen confundirse con influenza. La vacuna contra la influenza no previene estas enfermedades. Solo puede prevenir la influenza.

Algunas vacunas contra la influenza inactivadas contienen una cantidad muy pequeña de un conservante hecho a base de mercurio, que se llama timerosal. Estudios han demostrado que el timerosal presente en las vacunas no es perjudicial, pero existen vacunas contra la influenza que no contienen conservantes.

3 Algunas personas no deben recibir esta vacuna

Informe lo siguiente a la persona que le aplique la vacuna:

- **Si tiene alguna alergia severa que representa un riesgo para la vida**. Si alguna vez tuvo una reacción alérgica que representa un riesgo para la vida después de haber recibido una dosis de la vacuna contra la influenza o si tiene una alergia severa a cualquier parte de esta vacuna, que incluye, por ejemplo, alergia a la gelatina, los antibióticos o los huevos, es posible que le recomienden no recibir la vacuna. La mayoría de los tipos de vacuna contra la influenza, pero no todos, contienen una pequeña cantidad de proteínas de huevo.
- **Si alguna vez tuvo el síndrome de Guillain-Barré (Guillain-Barré Syndrome, GBS)** (una enfermedad severa que causa parálisis). Algunas personas con antecedentes de GBS no deben recibir esta vacuna. Esto debe ser analizado con su médico.
- **Si no se siente bien**. Por lo general, puede recibir la vacuna contra la influenza cuando tiene una enfermedad leve, pero es posible que se le recomiende que espere hasta sentirse mejor. Debe regresar cuando se sienta mejor.

U.S. Department of Health and Human Services Centers for Disease Control and Prevention

Influenza (inactivated) VIS - Spanish - 08/19/2014

Vacuna co

ইনফ্লুয়েঞ্জাটিকা

KTİF GRİP AŞISI

Вакцина против

Հարբուխի դեմՊատվաստանյութ

الأنفلونـــــزا لقـاح

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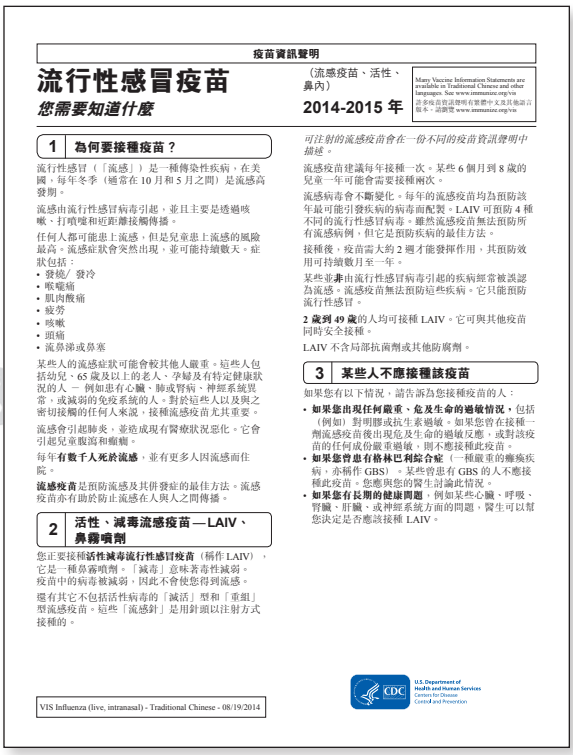
Spanish, Arabic, Chinese (simplified and traditional), French (European), Russian, Somali, Vietnamese, and more!



疫苗資訊聲明

流行性感冒疫苗 (流感疫苗、活性、鼻內)

您需要知道什麼

2014-2015 年

Many Vaccine Information Statements are available in Traditional Chinese and other languages. See www.immunize.org/vis

語言疫苗資訊聲明有繁體中文及其他語言版本，請瀏覽 www.immunize.org/vis

1 為何要接種疫苗？

流行性感冒（「流感」）是一種傳染性疾病，在美國，每年冬季（通常在 10 月和 5 月之間）是流感高發期。

流感由流行性感冒病毒引起，並且主要是透過咳嗽、打噴嚏和近距離接觸傳播。

任何人都可能患上流感，但是兒童患上流感的風險最高。流感症狀會突然出現，並可能持續數天。症狀包括：

- 發燒/ 發冷
- 喉嚨痛
- 肌肉酸痛
- 疲勞
- 咳嗽
- 頭痛
- 流鼻涕或鼻塞

某些人的流感症狀可能會較其他人嚴重。這些人包括幼兒、65 歲及以上的老人、孕婦及有特定健康狀況的人 — 例如患有心臟、肺或腎病、神經系統異常，或減弱的免疫系統的人。對於這些人以及與之密切接觸的任何人來說，接種流感疫苗尤其重要。

流感會引起肺炎，並造成現有腎療狀況惡化。它會引起兒童腹瀉和癲癇。

每年**有數千人死於流感**，並有更多人因流感而住院。

流感疫苗是預防流感及其併發症的最佳方法。流感疫苗亦有助於防止流感在人與人之間傳播。

2 活性、減毒流感疫苗 — LAIV、鼻霧噴劑

您正要接種**活性減毒流行性感冒疫苗**（稱作 LAIV），它是一種鼻霧噴劑。「減毒」意味著毒性減弱。疫苗中的病毒被減弱，因此不會使您得到流感。

還有其它不包括活性病毒的「滅活」型和「重組」型流感疫苗。這些「流感針」是用針頭以注射方式接種的。

可注射的流感疫苗會在一份不同的疫苗資訊聲明中描述。

流感疫苗建議每年接種一次。某些 6 個月到 8 歲的兒童一年可能會需要接種兩次。

流感病毒會不斷變化。每年的流感疫苗均為預防該年最可能引發疾病的病毒而配製。LAIV 可預防 4 種不同的流行性感冒病毒。雖然流感疫苗無法預防所有流感病例，但它是預防疾病的最佳方法。

接種後，疫苗需大約 2 週才能發揮作用，其預防效用可持續數月至一年。

某些**非**由流行性感冒病毒引起的疾病經常被誤認為流感。流感疫苗無法預防這些疾病。它只能預防流行性感冒。

2 歲到 49 歲的人均可接種 LAIV。它可與其他疫苗同時安全接種。

LAIV 不含局部抗菌劑或其他防腐劑。

3 某些人不應接種該疫苗

如果您有以下情況，請告訴為您接種疫苗的人：

- **如果您出現任何嚴重、危及生命的過敏情況，**包括（例如）對明膠或抗生素過敏。如果您曾在接種一劑流感疫苗後出現危及生命的過敏反應，或對該疫苗的任何成份嚴重過敏，則不應接種此疫苗。
- **如果您曾患有格林巴利綜合症**（一種嚴重的癱瘓疾病，亦稱作 GBS）。某些曾患有 GBS 的人不應接種此疫苗。您應與您的腎生討論此情況。
- **如果您有長期的健康問題**，例如某些心臟、呼吸、腎臟、肝臟、或神經系統方面的問題，醫生可以幫您決定是否應該接種 LAIV。

U.S. Department of Health and Human Services Centers for Disease Control and Prevention

VIS Influenza (live, intranasal) - Traditional Chinese - 08/19/2014

For all Vaccine Information Statements published in the United States and their translations, in up to 35 languages, visit **www.immunize.org/vis**

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Vaksen kont Influenza

인플루엔자 백신

First Do No Harm: Mandatory Influenza Vaccination Policies for Healthcare Personnel Help Protect Patients

View the complete list:
www.immunize.org/honor-roll/influenza-mandates

Refer to the position statements of the leading medical organizations listed below to help you develop and implement a mandatory influenza vaccination policy at your healthcare institution or medical setting. Policy titles, publication dates, links, and excerpts follow.

American Academy of Family Physicians (AAFP)

AAFP Mandatory Influenza Vaccination of Health Care Personnel (6/11)

▶ www.aafp.org/news-now/health-of-the-public/20110613mandatoryfluvacc.html

"The AAFP supports annual mandatory influenza immunization for health care personnel (HCP) except for religious or medical reasons (not personal preferences). If HCP are not vaccinated, policies to adjust practice activities during flu season are appropriate (e.g. wear masks, refrain from direct patient care)."

American Academy of Pediatrics (AAP)

Policy Statement – Recommendation for Mandatory Influenza Immunization of All Health Care Personnel (10/1/10)

▶ http://pediatrics.aappublications.org/cgi/content/abstract/peds.2010-2376v1

"The implementation of mandatory annual influenza immunization programs for HCP nationwide is long overdue. For the prevention and control of influenza, now is the time to put the health and safety of the patient first."

American College of Physicians (ACP)

ACP Policy on Influenza Vaccination of Health Care Workers (9/1/10)

▶ www.acponline.org/clinical_information/resources/adult_immunization/flu_hcw.pdf

"Vaccinating HCWs [healthcare workers] against influenza represents a duty of care, and a standard of quality care, so it should be reasonable that this duty should supersede HCW personal preference."

American Hospital Association (AHA)

AHA Endorses Patient Safety Policies Requiring Influenza Vaccination of Health Care Workers (7/22/11)

▶ www.aha.org/advocacy-issues/tools-resources/advisory/2011/110722-quality-adv.pdf

"To protect the lives and welfare of patients and employees, AHA supports mandatory patient safety policies that require either influenza vaccination or wearing a mask in the presence of patients across healthcare settings during flu season. The aim is to achieve the highest possible level of protection."

American Medical Directors Association (AMDA)

Mandatory Immunization for Long Term Care Workers (3/11)

▶ www.amda.com/governance/resolutions/J11.cfm

"Therefore be it resolved, AMDA – Dedicated to Long-Term Care Medicine – supports a mandatory annual influenza vaccination for every long-term health care worker who has direct patient contact unless a medical contraindication or religious objection exists."

American Pharmacists Association (APhA)

Requiring Influenza Vaccination for All Pharmacy Personnel (4/11)

▶ www.pharmacist.com/sites/default/files/files/2011ActionsoftheAPhAHoD-Public.pdf

"APhA supports an annual influenza vaccination as a condition of employment, training, or volunteering, within an organization that provides pharmacy services or operates a pharmacy or pharmacy department (unless a valid medical or religious reason precludes vaccination)."

American Public Health Association (APHA)

Annual Influenza Vaccination Requirements for Health Workers (11/9/10)

▶ www.apha.org/advocacy/policy/policysearch/default.htm?id=1410

"Encourages institutional, employer, and public health policy to require influenza vaccination of all health workers as a precondition of employment and thereafter on an annual basis, unless a medical contraindication recognized in national guidelines is documented in the worker's health record."

Association for Professionals in Infection Control and Epidemiology (APIC)

Influenza Vaccination Should Be a Condition of Employment for Healthcare Personnel, Unless Medically Contraindicated (2/1/11)

▶ www.apic.org/resource_/tinymcefilemanager/advocacy-pdfs/apic_influenza_immunization_of_hcp_12711.pdf

"As a profession that relies on evidence to guide our decisions and actions, we can no longer afford to ignore the compelling evidence that supports requiring influenza vaccine for HCP. This is not only a patient safety imperative, but is a moral and ethical obligation to those who place their trust in our care."

Infectious Diseases Society of America (IDSA)

Mandatory Immunization of Health Care Personnel Against Influenza and Other Infectious Diseases (rev. 12/10/13)

▶ www.idsociety.org/HCW_Policy

"Preventing healthcare-associated transmission of influenza and other infectious diseases can protect patients, HCP, and local communities. For this reason, IDSA supports mandatory immunization of HCP according to recommendations of the Advisory Committee for Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC)."

National Business Group on Health (NBGH)

Hospitals Should Require Flu Vaccination for all Personnel to Protect Patients' Health and Their Own Health (10/18/11)

▶ www.businessgrouphealth.org/pub/f314b0a7-2354-d714-511f-57f12807ba2c

"Hospitals should require flu vaccination for all personnel to protect patients' health and their own health."

National Patient Safety Foundation (NPSF)

NPSF Supports Mandatory Flu Vaccinations for Healthcare Workers (11/18/09)

▶ www.npsf.org/updates-news-press/press/media-alert-npsf-supports-mandatory-flu-vaccinations-for-healthcare-workers

"NPSF recognizes vaccine-preventable diseases as a matter of patient safety and supports mandatory influenza vaccination of health care workers to protect the health of patients, health care workers, and the community."

Society for Healthcare Epidemiology of America (SHEA)

Influenza Vaccination of Healthcare Personnel (rev. 8/31/10)

▶ www.journals.uchicago.edu/doi/full/10.1086/656558

"SHEA views influenza vaccination of HCP as a core patient and HCP safety practice with which noncompliance should not be tolerated."

CONTINUED ON NEXT PAGE▶

Practical Resources for Vaccinating Healthcare Personnel Against Influenza

U.S. Department of Health and Human Services (HHS)

Influenza Vaccination of Healthcare Personnel, part of HHS' National Action Plan to Prevent Healthcare-Associated Infections: Roadmap to Elimination

▶ www.hhs.gov/ash/initiatives/hai/hcpflu.html

Centers for Disease Control and Prevention (CDC)

Read the joint HICPAC/ACIP Recommendations *Influenza Vaccination of Health-Care Personnel* (*MMWR*, 2/24/06)

▶ www.cdc.gov/mmwr/PDF/rr/rr5502.pdf

For more recent guidance from CDC, see *Immunization of Health-Care Personnel: Recommendations of the Advisory Committee on Immunization Practices* (*MMWR*, 11/25/11)

▶ www.cdc.gov/mmwr/pdf/rr/rr6007.pdf

Visit CDC's Influenza web section

▶ www.cdc.gov/flu

American Nurses Association (ANA)

Unite to Fight the Flu! tool kit provides a listing of links for staff and patient educational materials, posters, recommendations, and PSAs

▶ www.anaimmunize.org/flutoolkit

Nurse-to-Nurse Influenza Vaccination video uses principles of risk communication to address the concerns of a nurse hesitant to receive influenza vaccine

▶ www.anaimmunize.org/flu-video

Colorado Hospital Association

Guidance for Developing a Mandatory Influenza Vaccination Program. This document is intended to provide guidance and information for developing a mandatory influenza vaccination program within individual hospitals:

▶ www.immunize.org/honor-roll/cha_guidance_mandatory_influenza_policy_hcp.pdf

Immunization Action Coalition of Washington Tool Kit

Make the Case toolkit promotes influenza and Tdap immunization among healthcare providers

▶ www.withinreachwa.org/what-we-do/healthy-communities/immunizations/for-providers/health-care-workers-toolkit/

National Adult and Influenza Immunization Summit (NAIIS)

Co-sponsored by the National Vaccine Program Office, CDC, and the Immunization Action Coalition. Visit the Summit website:

▶ www.izsummitpartners.org/vaccinating-healthcare-personnel

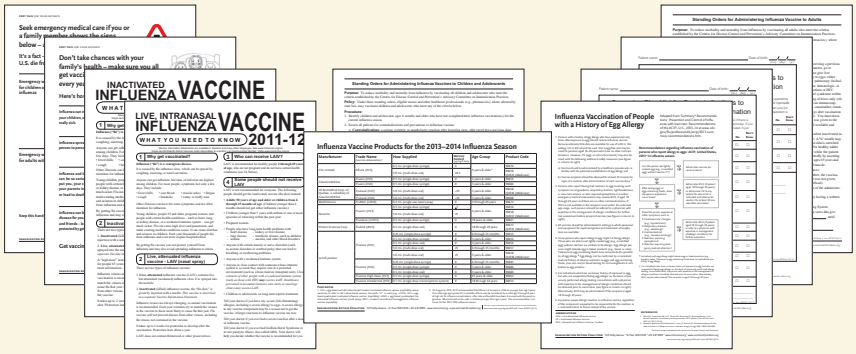
Immunization Action Coalition (IAC)

Visit the IAC's **Influenza Vaccination Honor Roll** to view stellar examples of influenza vaccination mandates in healthcare settings:
www.immunize.org/honor-roll/influenza-mandates

Visit IAC's Influenza web section: www.immunize.org/influenza

Get these IAC print materials online:

- Healthcare Personnel Vaccination Recommendations: www.immunize.org/catg.d/p2017.pdf
- Access Influenza Vaccine Information Statements (VISs) in more than 35 languages: www.immunize.org/vis



- *How to Administer Intramuscular, Intradermal, and Intranasal Influenza Vaccines:* www.immunize.org/catg.d/p2024.pdf
- *Influenza Vaccine Products for the 2014–15 Influenza Season:* www.immunize.org/catg.d/p4072.pdf
- *Standing Orders for Administering Influenza Vaccine to Adults:* www.immunize.org/catg.d/p3074.pdf
- *Screening Checklist for Contraindications to Inactivated Injectable Influenza Vaccination:* www.immunize.org/catg.d/p4066.pdf
- *Screening Checklist for Contraindications to Live Attenuated Intranasal Influenza Vaccination:* www.immunize.org/catg.d/p4067.pdf
- *Influenza Vaccination of People with a History of Egg Allergy:* www.immunize.org/catg.d/p3094.pdf
- *Declination of Influenza Vaccination* (for healthcare worker refusal: www.immunize.org/catg.d/p4068.pdf

The Joint Commission

Titled *Influenza Information*, this web section provides resources for healthcare institutions, including a free monograph, *Providing a Safer Environment for Health Care Personnel and Patients through Influenza Vaccination: Strategies from Research and Practice*

▶ www.jointcommission.org/topics/hai_influenza.aspx

Commentary by Arthur L. Caplan, PhD

Managing the Human Toll Caused by Seasonal Influenza – New York State's Mandate to Vaccinate or Mask (*JAMA*, 10/1/2013)

▶ http://jama.jamanetwork.com/article.aspx?articleid=1746248

Why Hospital Workers Should Be Forced to Get Flu Shots

▶ www.medscape.com/viewarticle/770383 (log-in required)

Screening Checklist for Contraindications to Injectable Influenza Vaccination

Patient name: _____ Date of birth: ____/____/____ (mo.) (day) (yr.)

Screening Checklist for Contraindications to Inactivated Injectable Influenza Vaccination

For patients (both children and adults) to be vaccinated: The following questions will help us determine if there is any reason we should not give you or your child inactivated injectable influenza vaccination today. If you answer "yes" to any question, it does not necessarily mean you (or your child) should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

	Yes	No	Don't Know
1. Is the person to be vaccinated sick today?	☐	☐	☐
2. Does the person to be vaccinated have an allergy to eggs or to a component of the vaccine?	☐	☐	☐
3. Has the person to be vaccinated ever had a serious reaction to influenza vaccine in the past?	☐	☐	☐
4. Has the person to be vaccinated ever had Guillain-Barré syndrome?	☐	☐	☐

Form completed by: _____ Date: _____

Form reviewed by: _____ Date: _____

Technical content reviewed by the Centers for Disease Control and Prevention

Immunization Action Coalition Saint Paul, Minnesota • 651-647-9009 • www.immunize.org • www.vaccineinformation.org

www.immunize.org/catg.d/p4066.pdf • Item #P4066 (9/14)

This checklist covers precautions and contraindications to vaccination with IIV.

Patients complete the checklist on page 1. Page 2 provides screening information for healthcare providers.

For a ready-to-copy 8½ x 11" version of this 2-page piece, visit www.immunize.org/catg.d/p4066.pdf

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uded a certain question on the screening checklist? If so, read the information consult the sources listed at the bottom of this page.

oday?
vaccine efficacy th an acute ntil their symp- ithout fever do not withhold

ve an e vaccine?
occur. The dual egg protein. only a limited mediate allergic ergy.

(RIV) may be gg allergy of any f RIV is not avail- teria for RIV hylactic reaction respiratory dis- should have IIV the recognition

not be egg- e.g., scrambled However, peo- g., cake) might hives only after either inactivat- ed influenza vaccine (IIV) or, if age-eligible, RIV (not LAIV). If IIV is to be administered, CDC further recommends the vaccine recipient be observed for at least 30 minutes after receipt of the vaccine for signs of a reaction.

Fluzone (sanofi pasteur) contains gelatin as a stabilizer; therefore a history of anaphylactic reaction to gelatin is a contraindication. Some inactivated influenza vaccines contain thimerosal as a preservative. Most people who had sensitivity to thimerosal when it was used in contact lens solution do not have reactions to thimerosal when it is used in vaccines. Check the package insert at www.immunize.org/packageinserts for a list of the vaccine components (i.e., excipients and culture media) used in the production of the vaccine, or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.

Some vaccines also contain latex in the prefilled syringe cap which may cause allergic reactions in latex sensitive people. Check the package inserts at www.immunize.org/packageinserts for information on which vaccines are affected, or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/latex-table.pdf.

3. Has the person to be vaccinated ever had a serious reaction to influenza vaccine in the past?
Patients reporting a serious reaction to a previous dose of inactivated influenza vaccine should be asked to describe their symptoms. Immediate—presumably allergic—reactions are usually a contraindication to further vaccination against influenza.

Fever, malaise, myalgia, and other systemic symptoms most often affect people who are first-time vaccinees. These mild-to-moderate local reactions are not a contraindication to future vaccination. Also, red eyes or mild upper facial swelling following vaccination with inactivated injectable influenza vaccine is most likely a coincidental event and not related to the vaccine; these people can receive injectable vaccine without further evaluation.

4. Has the person to be vaccinated ever had Guillain-Barré syndrome?
It is prudent to avoid vaccinating people who are not at high risk for severe influenza complications (see source 3) but who are known to have developed Guillain-Barré syndrome (GBS) within 6 weeks after receiving a previous influenza vaccination. As an alternative, physicians might consider using influenza antiviral chemoprophylaxis for these people. Although data are limited, the established benefits of influenza vaccination for the majority of people who have a history of GBS, and who are at high risk for severe complications from influenza, justify yearly vaccination.

Sources:
1. CDC. *Epidemiology & Prevention of Vaccine-Preventable Diseases*, WL Atkinson et al., editors, at www.cdc.gov/vaccines/pubs/pinkbook/index.html.
2. CDC. *General Recommendations on Immunization: Recommendations of the Advisory Committee on Immunization Practices (ACIP)* at www.cdc.gov/vaccines/hcp/acip-recs.
3. CDC. "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP) — United States, 2014–15 Influenza Season" at www.cdc.gov/mmwr/pdf/wk/mm6332.pdf, pages 691–7.

Screening Checklist for Contraindications to Live Attenuated Intranasal Influenza Vaccination

Patient name: _____ Date of birth: ____/____/____ (mo.) (day) (yr.)

Screening Checklist for Contraindications to Live Attenuated Intranasal Influenza Vaccination

For use with people age 2 through 49 years: The following questions will help us determine if there is any reason we should not give you or your child live attenuated intranasal influenza vaccine (FluMist) today. If you answer "yes" to any question, it does not necessarily mean you (or your child) should not be vaccinated. It just means additional questions must be asked. If a question is not clear, please ask your healthcare provider to explain it.

	Yes	No	Don't Know
1. Is the person to be vaccinated sick today?	☐	☐	☐
2. Does the person to be vaccinated have an allergy to eggs or to a component of the influenza vaccine?	☐	☐	☐
3. Has the person to be vaccinated ever had a serious reaction to intranasal influenza vaccine (FluMist) in the past?	☐	☐	☐
4. Is the person to be vaccinated younger than age 2 years or older than age 49 years?	☐	☐	☐
5. Does the person to be vaccinated have a long-term health problem with heart disease, lung disease, kidney disease, neurologic or neuromuscular disease, liver disease, metabolic disease (e.g., diabetes), or anemia or another blood disorder?	☐	☐	☐
6. If the person to be vaccinated is a child age 2 through 4 years, in the past 12 months, has a healthcare provider told you the child had wheezing or asthma?	☐	☐	☐
7. Does the person to be vaccinated have cancer, leukemia, HIV/AIDS, or any other immune system problem; or, in the past 3 months, have they taken medications that weaken the immune system, such as cortisone, prednisone, other steroids, or anticancer drugs; or have they had radiation treatments?	☐	☐	☐
8. Is the person to be vaccinated receiving antiviral medications?	☐	☐	☐
9. Is the child or teen to be vaccinated receiving aspirin therapy or aspirin-containing therapy?	☐	☐	☐
10. Is the person to be vaccinated pregnant or could she become pregnant within the next month?	☐	☐	☐
11. Has the person to be vaccinated ever had Guillain-Barré syndrome?	☐	☐	☐
12. Does the person to be vaccinated live with or expect to have close contact with a person whose immune system is severely compromised and who must be in protective isolation (e.g., an isolation room of a bone marrow transplant unit)?	☐	☐	☐
13. Has the person to be vaccinated received any other vaccinations in the past 4 weeks?	☐	☐	☐

Form completed by: _____ Date: _____

Form reviewed by: _____ Date: _____

Technical content reviewed by the Centers for Disease Control and Prevention

IMMUNIZATION ACTION COALITION Saint Paul, Minnesota • 651-647-9009 • www.immunize.org • www.vaccineinformation.org
www.immunize.org/catg.d/p4067.pdf • Item #P4067 (9/14)

This checklist covers precautions and contraindications to vaccination with LAIV.

Patients complete the checklist on page 1. Page 2 provides screening information for healthcare providers.

For a ready-to-copy 8½ x 11" version of this 2-page piece, visit www.immunize.org/catg.d/p4067.pdf

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uded a certain question on the screening checklist? If so, read the information consult the sources listed at the bottom of this page.

efficacy or increases ss usually should not or illnesses with or ine. Do not withhold

allergy to eggs or

uch as hives, wheez- k (not fainting)—after live attenuated ns no further doses. ay be used in people who have no other meet the age crite- uenza vaccine (IIV); mplete list of vaccine the production of the g/packageinserts) ads/appendices/b/

serious reaction e past? of LAIV should be ably allergic—reac- ith LAIV.

age 2 years or

ears or older than age

ong-term health ney disease, neurologic or neuromuscular disease, liver disease, metabolic disease (e.g., diabetes), or anemia or another blood disorder?**
The safety of LAIV in people with any of these health conditions has not been established. These conditions, including asthma in people age 5 years and older, should be considered precautions for the use of LAIV.

6. If the person to be vaccinated is a child age 2 through 4 years, in the past 12 months, has a healthcare provider told you that the child had wheezing or asthma?
LAIV is not recommended for a child this age if their parent or guardian answers yes to this question or if the child has a history of asthma or recurrent wheezing. Instead, the child should be given the inactivated injectable influenza vaccine.

7. Does the person to be vaccinated have cancer, leukemia, HIV/AIDS, or any other immune system problem; or, in the past 3 months, have they taken medications that weaken the immune system, such as cortisone, prednisone, other steroids, or anticancer drugs; or have they had radiation treatments?
People with weakened immune systems should not be given LAIV. Instead, they should be given the inactivated injectable influenza vaccine.

8. Is the person to be vaccinated receiving antiviral medications?
Receipt of certain influenza antivirals (e.g., amantadine, rimantadine, zanamivir, oseltamivir) could reduce LAIV vaccine efficacy; therefore, providers should defer vaccination with LAIV in people who took these antivirals within the previous 48 hours and to advise avoiding use of these antivirals for 14 days after vaccination, if feasible.

9. Is the child or teen to be vaccinated receiving aspirin therapy or aspirin-containing therapy?
Because of the theoretical risk of Reye's syndrome, children age 2 through 17 years on aspirin therapy should not be given LAIV. Instead they should be vaccinated with the inactivated injectable influenza vaccine.

10. Is the person to be vaccinated pregnant or could she become pregnant within the next month?
Pregnant women or women planning to become pregnant within a month should not be given LAIV. All pregnant women should, however, be vaccinated with the inactivated injectable influenza vaccine.

11. Has the person to be vaccinated ever had Guillain-Barré syndrome?
It is prudent to avoid vaccinating people who are not at high risk for severe influenza complications but who are known to have developed Guillain-Barré syndrome (GBS) within 6 weeks after receiving a previous influenza vaccination. As an alternative, physicians might consider using influenza antiviral chemoprophylaxis for these people. Although data are limited, the established benefits of influenza vaccination for the majority of people who have a history of GBS, and who are at high risk for severe complications from influenza, justify yearly vaccination.

12. Does the person to be vaccinated live with or expect to have close contact with a person whose immune system is severely compromised and who must be in protective isolation (e.g., an isolation room of a bone marrow transplant unit)?
Inactivated injectable influenza vaccine is preferred for people who anticipate close contact with a severely immunosuppressed person during periods in which the immunosuppressed person requires care in protective isolation (e.g., in a specialized patient-care area with a positive airflow relative to the corridor, high-efficiency particulate air filtration, and frequent air changes). Either the inactivated injectable influenza vaccine or LAIV may be used in people who have close contact with people having lesser degrees of immunosuppression.

13. Has the person to be vaccinated received any other vaccinations in the past 4 weeks?
People who were given an injectable live virus vaccine (e.g., MMR, MMRV, varicella, zoster, yellow fever) should wait 28 days before receiving LAIV. There is no reason to defer giving LAIV if people were vaccinated with an inactivated vaccine or if they have recently received blood or other antibody-containing blood products (e.g., IG).

Sources:
1. CDC. *Epidemiology & Prevention of Vaccine-Preventable Diseases*, WL Atkinson et al., editors, at www.cdc.gov/vaccines/pubs/pinkbook/index.html.
2. CDC. *General Recommendations on Immunization: Recommendations of the Advisory Committee on Immunization Practices (ACIP)* at www.cdc.gov/vaccines/hcp/acip-recs.
3. CDC. "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP) — United States, 2014–15 Influenza Season" at www.cdc.gov/mmwr/pdf/wk/mm6332.pdf, pages 691–7.

Standing Orders for Administering Influenza Vaccine to Adults

Purpose: To reduce morbidity and mortality from influenza by vaccinating all adults who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices.

Policy: Under these standing orders, eligible nurses and other healthcare professionals (e.g., pharmacists), where allowed by state law, may vaccinate patients who meet any of the criteria below.

Procedure:

1. Identify adults with no history of influenza vaccination for the current influenza season.
2. Screen all patients for contraindications and precautions to influenza vaccine:
   a. **Contraindications:** a serious systemic or anaphylactic reaction to a prior dose of the vaccine or to any of its components. For a list of vaccine components, refer to the manufacturer's package insert (www.immunize.org/package-inserts) or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf. Do not give live attenuated influenza vaccine (LAIV; nasal spray) to a person who has a history of either an anaphylactic or non-anaphylactic allergy to eggs, who is pregnant, who has immunsuppression (including that caused by medications or HIV), who is age 50 years or older, who has received influenza antivirals (e.g., amantadine, rimantadine, zanamivir, or oseltamivir) within the previous 48 hours or has possibility of use within 14 days after vaccination, or who cares for a severely immunosuppressed person who requires a protective environment.
   b. **Precautions:** moderate or severe acute illness with or without fever; history of Guillain Barré syndrome within 6 weeks of a previous influenza vaccination; for LAIV only, an adult with a medical condition which might predispose the adult to higher risk of complications attributable to influenza (e.g., chronic pulmonary [including asthma], cardiovascular [excluding isolated hypertension], renal, hepatic, neurologic/neuromuscular, hematologic, or metabolic [including diabetes] disorders.
   c. **Other considerations:** an egg-free recombinant hemagglutin influenza vaccine (RIV) may be used for people ages 18 through 49 years with egg allergy of any severity. People who experience onset of hives only after ingesting eggs: health care providers should administer inactivated influenza vaccine (IIV) and observe the patient for at least 30 minutes after receipt of the vaccine for signs of a reaction.
3. Provide all patients with a copy of the most current federal Vaccine Information Statement (VIS). You must document in the patient's medical record or office log, the publication date of the VIS and the date it was given to the patient. Provide non-English speaking patients with a copy of the VIS in their native language, if available and preferred; these can be found at www.immunize.org/vis.
4. Administer influenza vaccine as follows: a) Give 0.5 mL of IIV to adults of all ages, or RIV to adults age 18 through 49 years, intramuscularly (22–25g, 1–1½" needle) in the deltoid muscle. (Note: A ⅝" needle may be used for adults weighing less than 130 lbs [<60 kg] for injection in the deltoid muscle *only* if the subcutaneous tissue is not bunched and the injection is made at a 90 degree angle.) b) For healthy adults younger than age 50 years, give 0.2 mL of intranasal LAIV; 0.1 mL is sprayed into each nostril while the patient is in an upright position. c) For adults age 18 through 64 years, give 0.1 mL IIV-ID intradermally by inserting the needle of the microinjection system at a 90 degree angle in the deltoid muscle. d) For adults age 65 years and older, give 0.5 mL of high-dose IIV-IM intramuscularly (22–25g, 1–1½" needle) in the deltoid muscle.
5. Document each patient's vaccine administration information and follow up in the following places:
   a. **Medical chart:** Record the date the vaccine was administered, the manufacturer and lot number, the vaccination site and route, and the name and title of the person administering the vaccine. If vaccine was not given, record the reasons(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal).
   b. **Personal immunization record card:** Record the date of vaccination and the name/location of the administering clinic.
6. Be prepared for management of a medical emergency related to the administration of vaccine by having a written emergency medical protocol available, as well as equipment and medications.
7. Report all adverse reactions to influenza vaccine to the federal Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or (800) 822-7967. VAERS report forms are available at www.vaers.hhs.gov.

This policy and procedure shall remain in effect for all patients of the _____ until rescinded or until _____ (date).
(name of practice or clinic)

Medical Director's signature: _____ Effective date: _____

For standing orders for other vaccines, go to www.immunize.org/standing-orders

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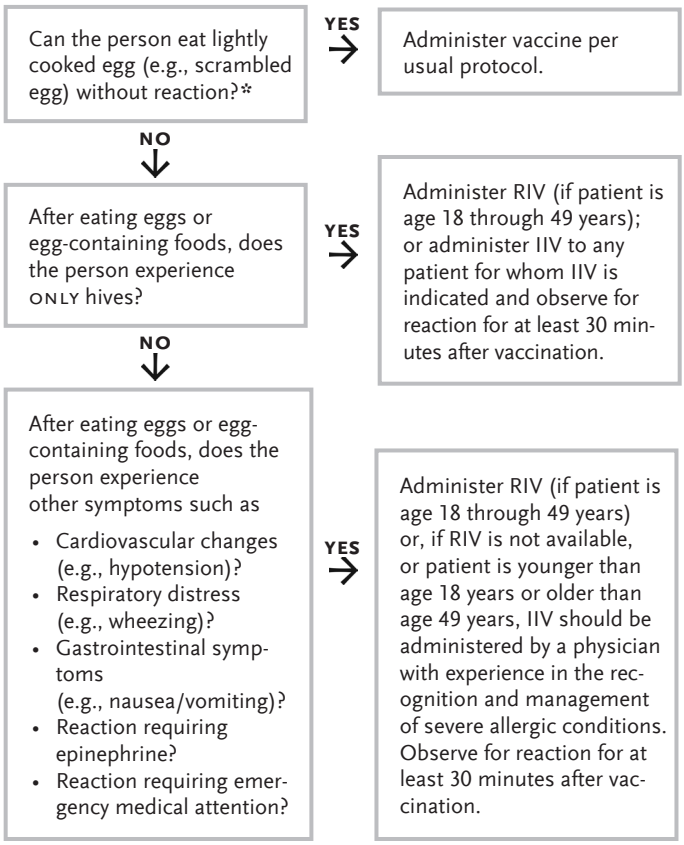
Influenza Vaccination of People with a History of Egg Allergy

- People with a history of egg allergy who have experienced only hives after exposure to egg should receive influenza vaccine. Because relatively few data are available for use of LAIV in this setting, inactivated influenza vaccine (IIV) or recombinant influenza vaccine (RIV) should be used. RIV is egg-free and may be used for people age 18 through 49 years who have no other contraindications. However, IIV (egg- or cell-culture based) also may be used, with the following additional safety measures (see figure in column to right)
  a) Vaccine should be administered by a healthcare provider who is familiar with the potential manifestations of egg allergy; and
  b) Vaccine recipients should be observed for at least 30 minutes for signs of a reaction after administration of each vaccine dose.[1]
- People who report having had reactions to egg involving such symptoms as angioedema, respiratory distress, lightheadedness, or recurrent emesis; or who required epinephrine or another emergency medical intervention, may receive RIV, if they are age 18 through 49 years and there are no other contraindications. If RIV is not available or the recipient is not within the indicated age range, IIV should be administered by a physician with experience in the recognition and management of severe allergic conditions (see figure in column to right).
- All vaccines should be administered in settings in which personnel and equipment for rapid recognition and treatment of anaphylaxis are available. ACIP recommends that all vaccination providers should be familiar with the office emergency plan.[2]
- People who are able to eat lightly cooked egg (e.g., scrambled egg) without reaction are unlikely to be allergic. Egg-allergic persons might tolerate egg in baked products (e.g., bread or cake). Tolerance to egg-containing foods does not exclude the possibility of egg allergy.[3] Egg allergy can be confirmed by a consistent medical history of adverse reactions to eggs and egg-containing foods, plus skin and/or blood testing for immunoglobulin E antibodies directed against egg proteins.
- For people who have no known history of exposure to egg, but who are suspected of being egg-allergic on the basis of previously performed allergy testing, consultation with a physician with expertise in the management of allergic conditions should be obtained before vaccination (see figure in column to right). Alternatively, RIV may be administered if the recipient is age 18 through 49 years.
- A previous severe allergic reaction to influenza vaccine, regardless of the component suspected to be responsible for the reaction, is a contraindication to future receipt of the vaccine.

Recommendations regarding influenza vaccination of persons who report allergy to eggs: ACIP, United States, 2014–15 influenza season.



* People with egg allergy might tolerate egg in baked products (e.g., bread or cake). Tolerance to egg-containing foods does not exclude the possibility of egg allergy. For people who have no known history of exposure to egg, but who are suspected of being egg-allergic on the basis of previously performed allergy testing, consultation with a physician with expertise in the management of allergic conditions should be obtained prior to vaccination. Alternatively, RIV may be administered if the recipient is age 18 through 49 years.

ABBREVIATIONS

LAIV = Live Attenuated Influenza Vaccine
IIV = Inactivated Influenza Vaccine
RIV = Recombinant Influenza Vaccine, Trivalent

REFERENCES

1. Kelso JM, Greenhawt MJ, Li JT, Niclas RA, Bernstein DI, Blessing-Moore J, et al. Adverse reactions to vaccines practice parameter 2012 update. J Clin All Immunol. 2012 Jul;130(1):25–43.
2. CDC. General recommendations on immunization: recommendations of the ACIP. MMWR 2011;60(No. RR-2).
3. Erlewyn-Lajeunesse M, Brathwaite N, Lucas JS, Warner JO. Recommendations for the administration of influenza vaccine in children allergic to egg. BMJ. 2009;339:b3680.

Adapted from CDC. "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP)–United States, 2014–2015 Influenza Season" at www.cdc.gov/mmwr/pdf/wk/mm6332.pdf, pages 691–7.

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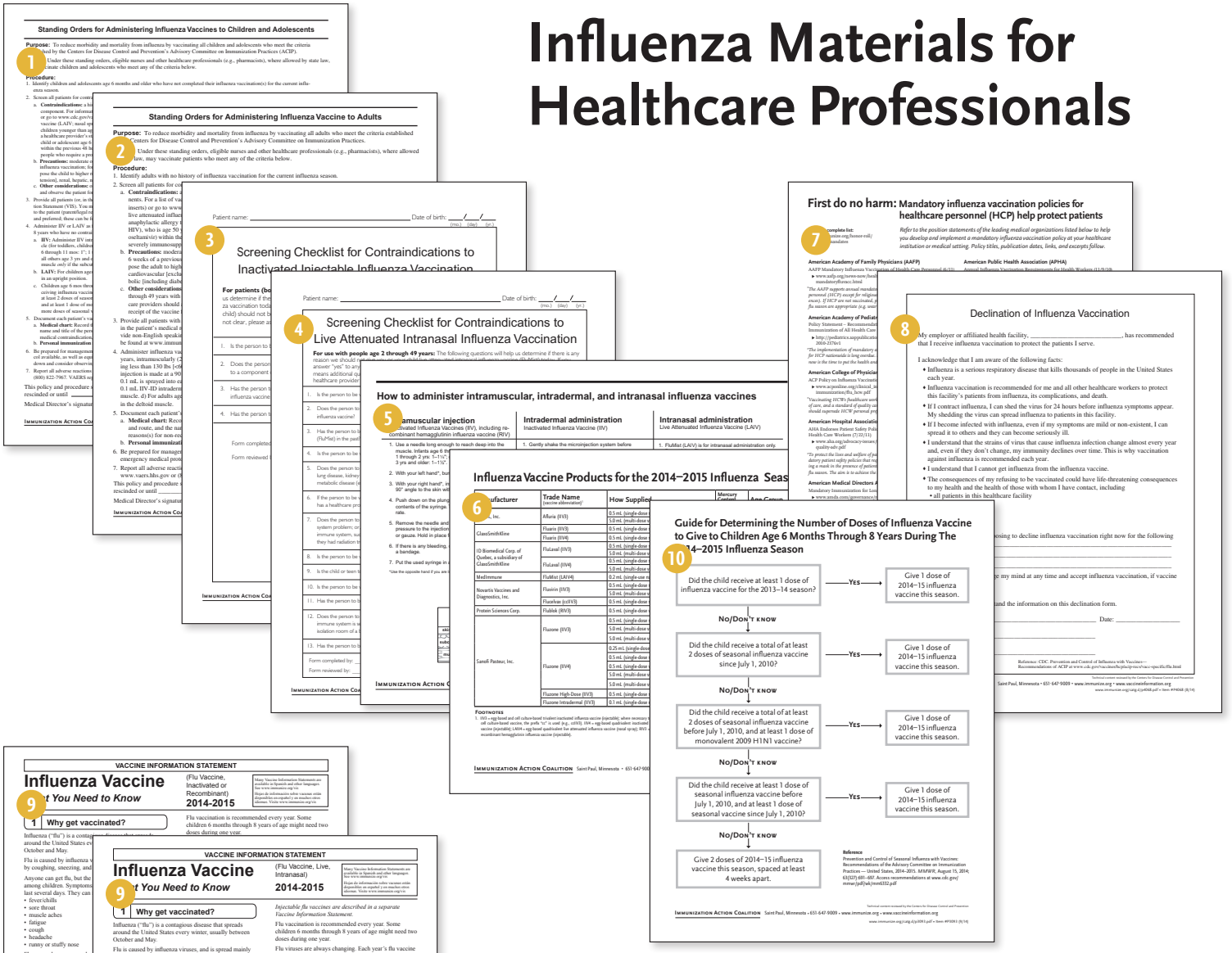
www.immunize.org/catg.d/p3094.pdf • Item #P3094 (9/14)

Influenza Materials for Healthcare Professionals



For 8½ x 11" copies of the pieces above, visit IAC's website:
www.immunize.org/handouts/influenza-vaccines.asp

1 Standing orders for administering influenza vaccines to children and adolescents:
www.immunize.org/catg.d/p3074a.pdf

2 Standing orders for administering influenza vaccine to adults:
www.immunize.org/catg.d/p3074.pdf

3 Screening checklist for inactivated injectable influenza vaccination:
www.immunize.org/catg.d/p4066.pdf

4 Screening checklist for live attenuated intranasal influenza vaccination:
www.immunize.org/catg.d/p4067.pdf

5 How to administer intramuscular, intradermal, and intranasal influenza vaccines:
www.immunize.org/catg.d/p2024.pdf

6 Influenza vaccine products for the 2014–2015 influenza season:
www.immunize.org/catg.d/p4072.pdf

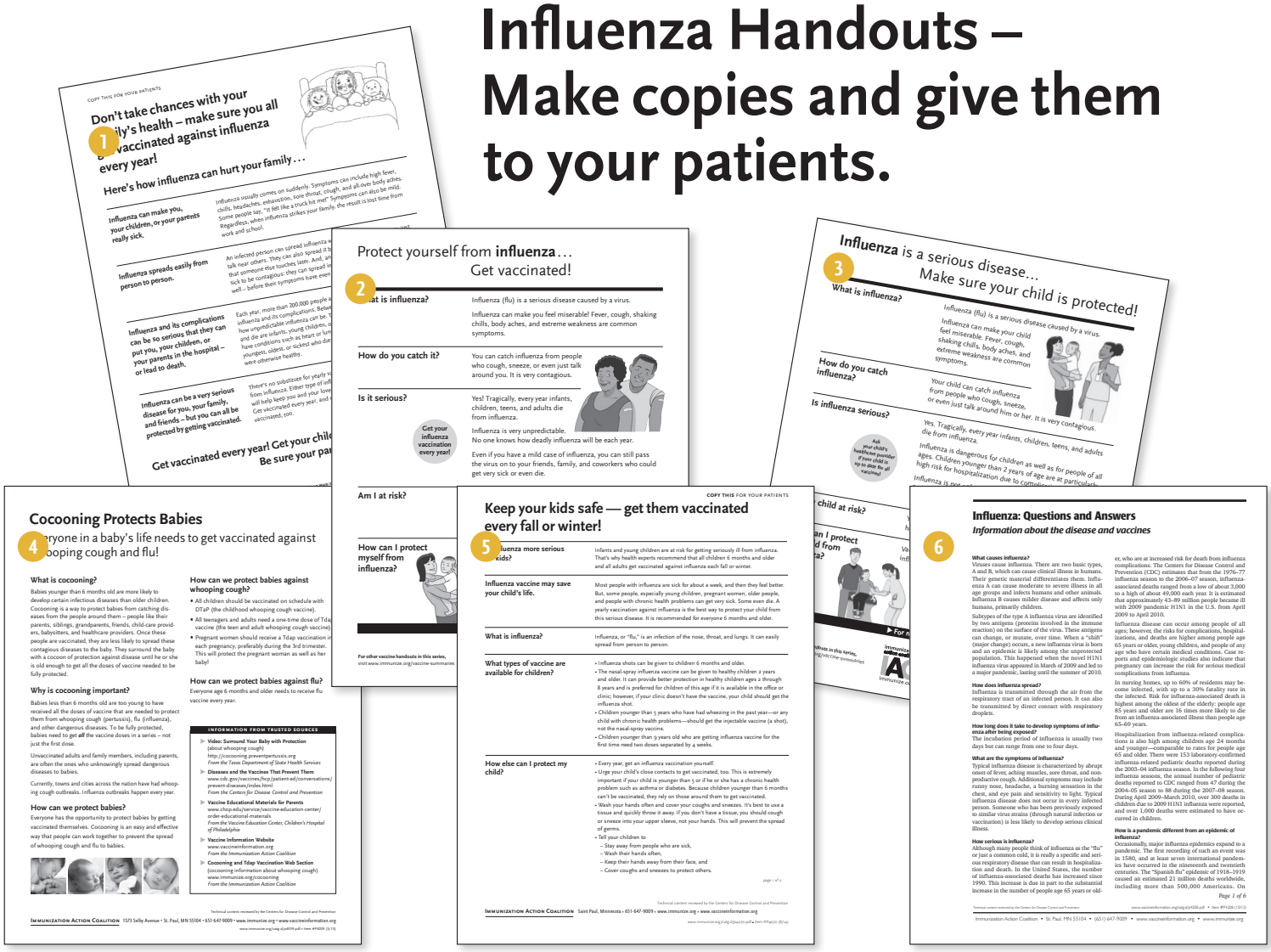
7 First do no harm: Protect patients by making sure all staff receive yearly influenza vaccine!
www.immunize.org/catg.d/p2014.pdf

8 Declination of influenza vaccination (for healthcare personnel refusal):
www.immunize.org/catg.d/p4068.pdf

9 Federally required Vaccine Information Statements in English and other languages:
www.immunize.org/vis
– Inactivated Influenza Vaccine: What you need to know:
www.immunize.org/vis/flu_inactive.pdf
– Live, Intranasal Influenza Vaccine: What you need to know:
www.immunize.org/vis/flu_live.pdf

10 Guide for determining number of doses of influenza vaccine for children 6 months through 8 years:
www.immunize.org/catg.d/p3093.pdf

Influenza Handouts – Make copies and give them to your patients.



For 8½ x 11" copies of the pieces above, visit IAC's website: www.immunize.org/handouts/influenza-vaccines.asp

1 **Don't take chances with your family's health – make sure you all get vaccinated against influenza!**
www.immunize.org/catg.d/p4069.pdf

2 **Protect yourself from influenza…Get vaccinated!**
www.immunize.org/catg.d/p4408.pdf
SPANISH: www.immunize.org/catg.d/p4408-01.pdf

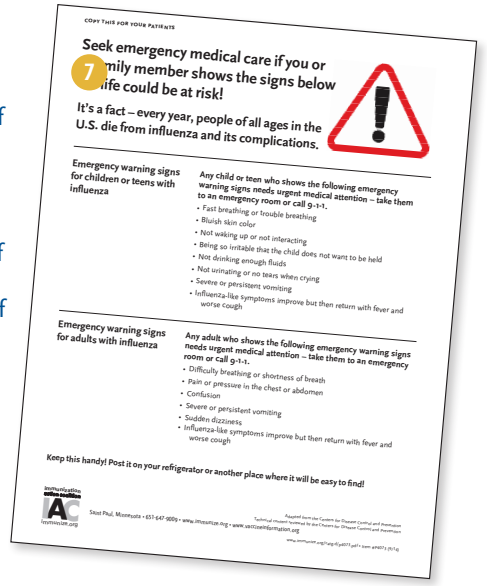
3 **Influenza is a serious disease…make sure your child is protected!**
www.immunize.org/catg.d/p4312.pdf
SPANISH: www.immunize.org/catg.d/p4312-01.pdf

4 **Cocooning protects babies**
www.immunize.org/catg.d/p4039.pdf
SPANISH: www.immunize.org/catg.d/p4039-01.pdf

5 **Keep your kids safe – get them vaccinated every fall or winter!**
www.immunize.org/catg.d/p4070.pdf
SPANISH: www.immunize.org/catg.d/p4070-01.pdf
ARABIC: www.immunize.org/catg.d/p4070-20.pdf
CHINESE: www.immunize.org/catg.d/p4070-08.pdf

6 **Influenza: Questions and answers**
www.immunize.org/catg.d/p4208.pdf

7 **Seek emergency medical care if you or a family member shows the signs below**
www.immunize.org/catg.d/p4073.pdf



Influenza Vaccine Products for the 2014–2015 Influenza Season

Manufacturer	Trade Name (vaccine abbreviation)[1]	How Supplied	Mercury Content (µg Hg/0.5mL)	Age Group	Product Code
bioCSL, Inc.	Afluria (IIV3)	0.5 mL (single-dose syringe)	0	9 years & older[2, 3]	90656
		5.0 mL (multi-dose vial)	24.5		90658 • Q2035 (Medicare)
GlaxoSmithKline	Fluarix (IIV3)	0.5 mL (single-dose syringe)	0	3 years & older	90656
	Fluarix (IIV4)	0.5 mL (single-dose syringe)	0	3 years & older	90686
ID Biomedical Corp. of Quebec, a subsidiary of GlaxoSmithKline	FluLaval (IIV3)	0.5 mL (single-dose syringe)	0	3 years & older	90656
		5.0 mL (multi-dose vial)	<25	3 years & older	90658 • Q2036 (Medicare)
	FluLaval (IIV4)	0.5 mL (single-dose syringe)	0	3 years & older	90686
		5.0 mL (multi-dose vial)	<25	3 years & older	90688
MedImmune	FluMist (LAIV4)	0.2 mL (single-use nasal spray)	0	2 through 49 years	90672
Novartis Vaccines and Diagnostics, Inc.	Fluvirin (IIV3)	0.5 mL (single-dose syringe)	≤1	4 years & older	90656
		5.0 mL (multi-dose vial)	25		90658 • Q2037 (Medicare)
	Flucelvax (ccIIV3)	0.5 mL (single-dose syringe)	0	18 years & older	90661
Protein Sciences Corp.	Flublok (RIV3)	0.5 mL (single-dose vial)	0	18 through 49 years	90673
Sanofi Pasteur, Inc.	Fluzone (IIV3)	0.5 mL (single-dose syringe)	0	3 years & older	90656
		5.0 mL (multi-dose vial)	25	6 through 35 months	90657
		5.0 mL (multi-dose vial)	25	3 years & older	90658 • Q2038 (Medicare)
	Fluzone (IIV4)	0.25 mL (single-dose syringe)	0	6 through 35 months	90685
		0.5 mL (single-dose syringe)	0	3 years & older	90686
		0.5 mL (single-dose vial)	0	3 years & older	90686
		5.0 mL (multi-dose vial)	25	6 through 35 months	90687
		5.0 mL (multi-dose vial)	25	3 years & older	90688
	Fluzone High-Dose (IIV3)	0.5 mL (single-dose syringe)	0	65 years & older	90662
	Fluzone Intradermal (IIV3)	0.1 mL (single-dose microinjection system)	0	18 through 64 years	90654

Footnotes

1. IIV3 = egg-based and cell culture-based trivalent inactivated influenza vaccine (injectable); where necessary to refer to cell culture-based vaccine, the prefix "cc" is used (e.g., ccIIV3). IIV4 = egg-based quadrivalent inactivated influenza vaccine (injectable); LAIV4 = egg-based quadrivalent live attenuated influenza vaccine (nasal spray); RIV3 = trivalent recombinant hemagglutinin influenza vaccine (injectable).
2. In 2010, ACIP recommended that Afluria not be used in children younger than age 9 years. If no other age-appropriate IIV is available, Afluria may be considered for a child age 5 through 8 years at high risk for influenza complications, after risks and benefits have been discussed with the parent or guardian. Afluria should not be used in children younger than age 5 years. This recommendation continues for the 2014–2015 influenza season.
3. Afluria is approved by the Food and Drug Administration for intramuscular administration with the PharmaJet Stratis Needle-Free Injection System for persons age 18 through 64 years.

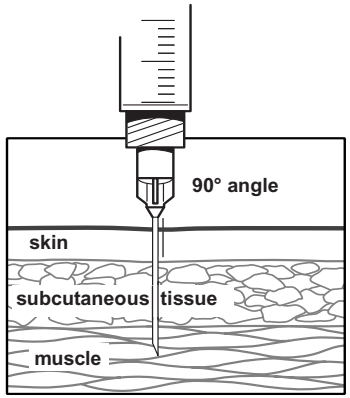
How to Administer Intramuscular, Intradermal, and Intranasal Influenza Vaccines

Intramuscular injection

Inactivated Influenza Vaccines (IIV), including recombinant hemagglutinin influenza vaccine (RIV)

1. Use a needle long enough to reach deep into the muscle. Infants age 6 through 11 mos: 1"; 1 through 2 yrs: 1–1¼"; children and adults 3 yrs and older: 1–1½".
2. With your left hand*, bunch up the muscle.
3. With your right hand*, insert the needle at a 90° angle to the skin with a quick thrust.
4. Push down on the plunger and inject the entire contents of the syringe. There is no need to aspirate.
5. Remove the needle and simultaneously apply pressure to the injection site with a dry cotton ball or gauze. Hold in place for several seconds.
6. If there is any bleeding, cover the injection site with a bandage.
7. Put the used syringe in a sharps container.

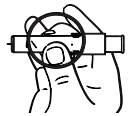
*Use the opposite hand if you are left-handed.



Intradermal administration

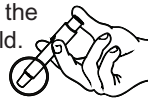
Inactivated Influenza Vaccine (IIV)

1. Gently shake the microinjection system before administering the vaccine.
2. Hold the system by placing the thumb and middle finger on the finger pads; the index finger should remain free.



3. Insert the needle perpendicular to the skin, in the region of the deltoid, in a short, quick movement.
4. Once the needle has been inserted, maintain light pressure on the surface of the skin and inject using the index finger to push on the plunger. Do not aspirate.

5. Remove the needle from the skin. With the needle directed away from you and others, push very firmly with the thumb on the plunger to activate the needle shield. You will hear a click when the shield extends to cover the needle.



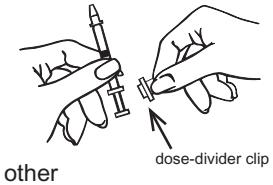
6. Dispose of the applicator in a sharps container.

Intranasal administration

Live Attenuated Influenza Vaccine (LAIV)

1. FluMist (LAIV) is for intranasal administration only. Do not inject FluMist.
2. Remove rubber tip protector. Do not remove dose-divider clip at the other end of the sprayer.
3. With the patient in an upright position (i.e., head not tilted back), place the tip just inside the nostril to ensure LAIV is delivered into the nose. The patient should breathe normally.

4. With a single motion, depress plunger as rapidly as possible until the dose-divider clip prevents you from going further.
5. Pinch and remove the dose-divider clip from the plunger.



6. Place the tip just inside the other nostril, and with a single motion, depress plunger as rapidly as possible to deliver the remaining vaccine.
7. Dispose of the applicator in a sharps container.

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www.immunize.org/catg.d/p2024.pdf • Item #P2024 (9/14)

Seek emergency medical care if you or a family member shows the signs below – a life could be at risk!

It's a fact – every year, people of all ages in the U.S. die from influenza and its complications.

Emergency warning signs for children or teens with influenza

Any child or teen who shows the following emergency warning signs needs urgent medical attention – take them to an emergency room or call 9-1-1.

- Fast breathing or trouble breathing
- Bluish skin color
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Not drinking enough fluids
- Not urinating or no tears when crying
- Severe or persistent vomiting
- Influenza-like symptoms improve but then return with fever and worse cough

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Emergency warning signs for adults with influenza

Any adult who shows the following emergency warning signs needs urgent medical attention – take them to an emergency room or call 9-1-1.

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Confusion
- Severe or persistent vomiting
- Sudden dizziness
- Influenza-like symptoms improve but then return with fever and worse cough

Keep this handy! Post it on your refrigerator or another place where it will be easy to find!

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older. The two vaccines should not be given at the same visit.

Pneumococcal vaccine-naïve persons: Adults age 65 years and older who have not previously received pneumococcal vaccine or whose previous vaccination history is unknown should receive a dose of PCV13 first, followed by a dose of PPSV23 6–12 months later. If PPSV23 cannot be administered during this time window, the PPSV23 dose should be given at the next visit. The two pneumococcal vaccines should not be co-administered.

If the doses of PCV13 and PPSV23 are administered at an interval less than 6–12 months apart (sooner than recommended), the minimum acceptable interval between the two doses is 8 weeks (which means that PPSV23 must be repeated if given earlier than this).

Previous vaccination with PPSV23: Adults age 65 years and older who have previously received one or more doses of PPSV23 also should receive a dose of PCV13 if they have not yet received it. A dose of PCV13 should be given at least 1 year after receipt of the most recent PPSV23 dose. For those in whom an additional dose of PPSV23 is indicated, this subsequent PPSV23 dose should be given 6–12 months after PCV13 and at least 5 years after the most recent dose of PPSV23.

Zoster vaccine

Is a history of genital herpes a contraindication or precaution to zoster vaccination?

No. There is no evidence that zoster vaccine has any effect on herpes simplex virus.

Hepatitis A vaccine

For hepatitis A vaccination, the recommended interval between the 2-dose series is at least 6 months. Is this the same as 24 weeks?

No. The recommended interval between dose #1 and #2 of hepatitis A vaccine is 6 calendar months, not 24 weeks. See CDC's *The Pink Book* (*Epidemiology and Prevention of Vaccine Preventable Diseases*) available at www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/A/age-interval-table.pdf, footnote 5.

General vaccine questions

Our office is small and we only store vaccine in the refrigerator of a two-compartment refrigerator/freezer. Can we use the freezer portion to store staff food?

CDC recommends using separate refrigerator and freezer units for vaccine storage, but still allows use of a combination refrigerator/freezer if you only use the refrigerator portion for storing vaccines (as you are doing). CDC also recommends that you store food and beverages in a separate storage unit from vaccines, which you are technically doing but there may still be an impact on the refrigerator temperature by the opening and closing of the freezer door by staff. (In most two-compartment units, cold air from the freezer is circulated for cooling the refrigerator.)

The ideal situation would be to get a stand-alone pharmaceutical/purpose-built refrigerator unit for your vaccines, and use your refrigerator/freezer combination unit for your food and drinks. Please refer to pages 30 and 50 of the "Vaccine Storage and Handling Toolkit" available at www.cdc.gov/vaccines/recs/storage/toolkit/storage-handling-toolkit.pdf, for more detailed information.

If a patient pulls away during administration of a vaccine and the needle comes out, is it okay to reintroduce the same needle and finish the injection?

No. The needle should be considered to be contaminated. The needle and syringe should be discarded. A new syringe, needle, and dose of vaccine should be used. A full repeat dose should be given.

I know that immunosuppressed patients can receive inactivated vaccines, but not live vaccines. Will these patients who receive inactivated vaccines develop a sufficient immune response to make vaccinating them worthwhile?

Inactivated vaccines can be administered to people who take immunosuppressive drugs or who have a condition that causes them to be immunocompromised. The vaccines might not be as effective as they would be when given to a person with an intact immune system. If possible, the immunosuppresive drug should be discontinued for a month prior to vaccination, then allow the vaccine 2–3 weeks to generate an immune response before restarting the immunosuppressive treatment, but obviously, this is not always possible.

Determination of altered immunocompetence is important because incidence or severity of some vaccine-preventable diseases is greater in people with altered immunocompetence. As a result, certain vaccines (e.g., inactivated influenza vaccine and pneumococcal vaccines) are recommended specifically for people with altered immunocompetence.

More information can be found in ACIP's *General Recommendations on Immunization* available at www.cdc.gov/mmwr/pdf/rr/rr6002.pdf, pages19–23.

Is protective eyewear needed for those who administer vaccines so they can avoid blood spatter?

ACIP does not specifically recommend eye protection when administering vaccines.

If a patient has had an anaphylactic reaction to a bee sting, is it safe for her to receive injected vaccines?

Yes. Allergy to bee venom is not a contraindication for any vaccine.

Polio vaccine

Please describe the new CDC interim recommendations for polio vaccination for adults traveling to and from countries affected by wild polio.

For adults who were routinely vaccinated as children, CDC states those adults are considered to have lifelong immunity to poliovirus, but data are lacking. As a precaution, people age 18 years and older who are traveling to areas where there has been wild poliovirus circulation in the last 12 months and who have received a routine series with either IPV or OPV in childhood should receive another dose of IPV before departure. For these adults, available data do not indicate the need for more than a single lifetime booster dose with IPV.

For detailed information about how to protect adults who are unvaccinated, incompletely vaccinated, or whose vaccination status is unknown, refer to the CDC guidance document titled "Interim CDC Guidance for Polio Vaccination for Travel to and from Countries Affected by Wild Poliovirus" available at www.cdc.gov/mmwr/pdf/wk/mm6327.pdf, pages 591–4.

Ten countries (Afghanistan, Cameroon, Equatorial Guinea, Ethiopia, Iraq, Israel, Nigeria, Pakistan, Somalia, and Syria) are currently considered polio-infected. For more information for clinicians, visit CDC's Travel website at wwwnc.cdc.gov/travel/news-announcements/polio-guidance-new-requirements.

To submit an "Ask the Experts" question . . . *Email your questions to the Immunization Action Coalition (IAC) at admin@immunize.org. We will respond to your inquiry. Because we receive hundreds of email messages each month, we cannot promise that we will use your question in "Ask the Experts." IAC works with CDC to compile new Q&As for our publications based on commonly asked questions. Most of the questions are thus a composite of several inquiries.*

Vaccinate Adults correction policy

If you find an error, please notify us immediately by sending an email message to admin@immunize.org. We publish notification of significant errors in our email announcement service, ***IAC Express.*** Be sure you're signed up for this service. To subscribe, visit www.immunize.org/subscribe.

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