

NEEDLE TIPS

from the Immunization Action Coalition — www.immunize.org

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Immunization Action Coalition Receives Major Award from Centers for Disease Control and Prevention

The Immunization Action Coalition (IAC), publisher of *Needle Tips*, and the National Center for Immunization and Respiratory Diseases (NCIRD) of the Centers for Disease Control and Prevention (CDC) are entering into a cooperative agreement with important implications for healthcare professionals and their patients. The award is for \$1.4 million over five years.

This cooperative agreement will support three of IAC's current key functions: (1) creation and distribution of weekly editions of *IAC Express* to IAC's email subscribers; (2) publication of "Ask the Experts," a forum in which CDC and IAC immunization experts answer questions from healthcare professionals who provide immunization services; and (3) creation of new immunization education materials designed to respond to the needs of immunization providers, parents, and patients. Importantly, the new agreement also makes IAC the nation's central clearinghouse for Vaccine Information Statements (VISs) in languages other than English. The award supports central coordination and distribution of VIS trans-

lations, as well as translation of a limited number of VISs.

VISs are the foundation of patient- and parent-centered vaccination delivery. Mandated by the National Childhood Vaccine Injury Act, these information sheets help ensure that families receive essential information about each vaccine including, for example, the vaccine's benefits and potential side effects. Proper distribution of the VISs will inform vaccine recipients, or their parents or legal representatives, about the vaccine prior to receiving a dose. Providing this important information in a wide array of languages upholds IAC's and CDC/NCIRD's shared dedication to giving all Americans access to the vaccination information they need.

"This partnership between CDC and IAC will significantly improve the immunization information available to those patients and parents who are best communicated with in languages other than English," said IAC's Executive Director, Deborah Wexler, MD.

Ask the Experts

IAC extends thanks to our experts, medical epidemiologist Andrew T. Kroger, MD, MPH; nurse educator Donna L. Weaver, RN, MN; and medical epidemiologist William L. Atkinson, MD, MPH. All are with the National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention (CDC).

If a child younger than age 9 years did not receive a flu vaccine last year but did receive 2 doses of influenza vaccine the previous year, how many doses of flu vaccine should the child receive this year?

ACIP's influenza recommendations for children

Immunization questions?

- Call the CDC-INFO Contact Center at (800) 232-4636 or (800) CDC-INFO
- Email nipinfo@cdc.gov
- Call your state health dept. (phone numbers at www.immunize.org/coordinators)

age 6 months through 8 years have changed for the 2011–12 season. According to the new algorithm, such a child needs 2 doses of influenza vaccine this influenza season, separated by at least 4 weeks. Here is a summary:

A child's influenza vaccination history prior to the 2010–11 influenza season is irrelevant to determining the number of influenza vaccine doses needed for a child age 6 months through 8 years. Ignore any influenza vaccine (including monovalent) received prior to the 2010–11 season.

Children age 6 months through 8 years who are receiving influenza vaccine for the FIRST time should receive 2 doses, separated by at least 4 weeks.

Children whose influenza vaccination status from the previous season is not known should also receive 2 doses at least 4 weeks apart.

Children age 6 months through 8 years who did not receive AT LEAST 1 dose of the 2010–11 vaccine should also receive 2 doses, separated by at least 4 weeks, REGARDLESS of their previous influenza vaccination history.

Children age 6 months through 8 years who received 1 dose of seasonal influenza vaccine during the 2010–11 season need ONLY 1 dose this season. This is because the vaccine strains are the same this season as last season.

You may find this Immunization Action Coalition handout helpful: www.immunize.org/catg.d/p3093.pdf.

If a child age 2 through 8 years needs 2 doses of influenza vaccine and receives TIV as the first dose, does the second dose have to be

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IAC's
"Ask the
Experts"
team
from
CDC



Andrew T. Kroger, MD, MPH



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TIV, or can live attenuated influenza vaccine (LAIV) be used?

As long as a child is eligible to receive nasal spray vaccine (i.e., is healthy and is in the approved age range), it is acceptable to give the child 1 dose of each type of influenza vaccine. The doses should be spaced at least 4 weeks apart.

A co-worker of mine says we are supposed to give infants preservative-free influenza vaccine. Is this true?

No. CDC and ACIP express no preference for preservative-free vaccine for infants or any other group of vaccine recipients. See page 22 of the 2010–11 ACIP influenza recommendations: www.cdc.gov/mmwr/pdf/rr/rr5908.pdf.

No scientific evidence exists that thimerosal in vaccines, including influenza vaccines, is a cause of adverse events, unless the patient has a systemic allergy to thimerosal. However, some states have enacted legislation that restricts the use of thimerosal-containing vaccines. Check with your state immunization manager to see if your state is one of them (www.immunize.org/coordinators).

Has ACIP recommended the use of high-dose and intradermal influenza vaccines?

Yes, ACIP has recommended the use of high-dose and intradermal influenza vaccines, along with all other FDA-approved trivalent inactivated influenza vaccines (TIV). ACIP has not stated a preference for any TIV product over another. The formulation or presentation a provider uses is the provider's choice as long as an age-appropriate product is used and is administered correctly. Providers need to choose the type of vaccine most appropriate for their patient population. The Immunization Action Coalition (IAC) website has manufacturers' package inserts for every influenza vaccine product licensed for U.S. use during the 2011–12 influenza

season. Go to www.immunize.org/packageinserts/pi_influenza.asp.

The 2011–12 Influenza VIS states that giving pneumococcal conjugate vaccine (PCV13) and inactivated influenza vaccine simultaneously may increase febrile seizures. Can we continue to give these two vaccines at the same time?

Yes, you can. Increased rates of febrile seizures have been reported among children, especially those age 12 through 23 months, who received simultaneous vaccination with TIV and PCV13, when compared with children who received these vaccines separately. However, because of the risks associated with delaying either of these vaccines, ACIP does not recommend administering them at separate visits or deviating from the recommended vaccine schedule in any way.

Febrile seizures are not uncommon, occurring in 2% to 5% of all children; and they are generally benign. Healthcare providers should be prepared to discuss parents' questions about this issue, including questions about fever and febrile seizures.

The 2011–12 inactivated influenza vaccine VIS states: "young children who get inactivated flu vaccine and pneumococcal vaccine (PCV13) at the same time appear to be at increased risk for seizures caused by fever." ACIP chose to include this statement on the VIS to inform parents of this potential risk.

For more information, see these CDC resources: www.cdc.gov/vaccinesafety/Concerns/FebrileSeizures.html and www.cdc.gov/vaccines/pubs/vis/tiv-pcv-note.htm.

Can you explain the newest recommendation for vaccinating people with egg allergies?

Any allergic reaction to eggs severe enough to cause hives is a contraindication for LAIV; however, it is only a precaution for receipt of TIV. If the reaction consists of hives only, the person should be given TIV by a healthcare provider who is familiar with the potential manifestations of egg allergy. The person should also be observed for at least 30 minutes after being vaccinated. If the reaction includes more severe symptoms, including but not limited to swelling of the lips and throat, angioedema, lightheadedness, cardiovascular symptoms (e.g., hypotension), respiratory symp-

oms (e.g., wheezing), gastrointestinal symptoms (e.g., nausea, vomiting), a history of required use of epinephrine following egg ingestion, or a history of required emergency medical intervention, then the patient should be referred to a physician familiar with the management of allergic conditions.

How do you suggest we screen patients for potential egg allergy in our busy clinic?

People who indicate that they can eat lightly cooked eggs (e.g., scrambled eggs) without reaction are unlikely to have an egg allergy. Don't rely on their ability to eat eggs in baked products (e.g., cakes, cookies), however, since the baking might denature the protein and mask an intrinsic anaphylactic allergy to eggs.

With Boostrix (Tdap, GSK) now licensed for use in people age 65 years and older, should we stop using Adacel (Tdap, sanofi pasteur) for this age group and use only Boostrix?

No. CDC allows use of either product for people age 65 years and older.

We have a local provider who gives immunizations in the buttocks. This isn't the preferred anatomic site for any age, is it?

No, it isn't. Such information is covered in ACIP's General Recommendations on Immunization: www.cdc.gov/mmwr/pdf/rr/rr6002.pdf (pages 13–16).

Helpful related handouts from IAC

- How to Administer IM and SC Injections: www.immunize.org/catg.d/p2020.pdf
- How to Administer IM and SC Injections to Adults: www.immunize.org/catg.d/p2020A.pdf

Healthcare personnel issues

Which vaccines does ACIP specifically recommend that healthcare personnel (HCP) receive in order to work in a healthcare setting?

ACIP recommends that all HCP be vaccinated with 2 doses of MMR vaccine (or have evidence of measles, mumps, and rubella immunity), annual influenza vaccination, 1 dose of Tdap (especially to protect against pertussis), 3 doses of hepatitis B vaccine for those who might be exposed to blood or body fluids at work, and 2 doses of varicella vaccine (or have evidence of varicella immunity). For definitions of evidence of immunity to mumps, measles, rubella, and varicella, please refer to www.cdc.gov/vaccines/recs/provisional/downloads/mmr-evidence-immunity-Aug2009-508.pdf (for MMR) and www.cdc.gov/mmwr/pdf/rr/rr5604.pdf (page 26, for varicella).

For which workers in healthcare settings does the Occupational Safety and Health Administration (OSHA) require that hepatitis B vaccine be provided?

OSHA requires that hepatitis B vaccine be provided free of charge to HCP who have reasonably anticipated contact with blood or body fluids on the job.

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Needle Tips 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.

To receive “Ask the Experts” Q&As by email, subscribe to the Immunization Action Coalition’s news service, *IAC Express*. Special “Ask the Experts” issues are published five times per year.

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To find more than a thousand “Ask the Experts” Q&As answered by CDC experts, go to www.immunize.org/askexperts

This requirement does not include HCP who would not be expected to have occupational risk, such as billing staff and general office workers. Employers must ensure that workers who decline hepatitis B vaccination sign a declination form. For a fact sheet about this OSHA requirement, go to www.osha.gov/OshDoc/data_BloodborneFacts/bbfact05.pdf.

If an employee has 2 documented doses of MMR but has negative or equivocal titers for 1 or more of the antigens, what should we do? Same question if an employee has 2 documented doses of varicella vaccine but tests negative.

Actually, ACIP does not recommend testing for immunity in such situations. For measles, mumps, and rubella, ACIP considers 2 documented doses of MMR vaccine given on or after age 1 year and at least 28 days apart to be evidence of immunity for HCP. For varicella, ACIP considers 2 documented doses of vaccine to be evidence of immunity for HCP as long as doses are given no earlier than age 12 months, with at least 3 months between doses for children younger than age 13 years, or at least 4 weeks between doses for people age 13 years and older.

Because of the limitations of serologic testing, tests for even properly vaccinated individuals will often come back as negative or equivocal, putting the employee health service in the difficult position of having to do something (e.g., give additional doses, perform a follow-up titer).

If a healthcare worker does not have any documented doses of MMR and/or varicella vaccine, he or she can (1) be tested for immunity or (2) just be given 2 doses of MMR and/or varicella at least 4 weeks apart. ACIP does not recommend serologic testing after vaccination.

For more information on this topic, go to

- IAC’s “Ask the Experts” web section on MMR vaccination www.immunize.org/askexperts/experts_mmr.asp
- IAC’s “Ask the Experts” web section on varicella vaccination www.immunize.org/askexperts/experts_var.asp
- ACIP recommendations on the prevention of measles, mumps, and rubella www.cdc.gov/mmwr/PDF/rr/rr4708.pdf (pages 18–20)
- ACIP recommendations on the prevention

of varicella www.cdc.gov/mmwr/pdf/rr/rr5604.pdf (page 26)

How soon after a dose of Td can HCP receive a dose of Tdap?

If they have not previously received Tdap, HCP in hospital, long-term care, and ambulatory care settings should receive a single dose of Tdap as soon as feasible and without regard to the dosing interval since the last Td dose. No minimum interval exists between receiving Td and Tdap.

Can Tdap be administered to pregnant HCP?

In June 2011, after studying new safety and efficacy data, ACIP voted to recommend that pregnant women who have never received the Tdap vaccine be vaccinated with Tdap during their third trimester or the second half of their second trimester (after 20 weeks gestation) to optimize the concentration of maternal antibodies transferred to the fetus. ACIP made this recommendation in response to the continuing pertussis outbreak, with the goal of protecting newborns with maternal antibodies and decreasing the risk of transmission from mother to infant after birth. If the vaccine is not administered during pregnancy, it should be administered immediately postpartum. On October 21, 2011, CDC issued recommendations for use of Tdap in pregnant women. To obtain the recommendations, go to pages 1424–1426 of this document: www.cdc.gov/mmwr/pdf/wk/mm6041.pdf.

Can pregnant healthcare personnel administer live-virus vaccines?

A pregnant staff member can administer any vaccine except smallpox vaccine.

Why is it so important to vaccinate HCP against influenza?

Because HCP frequently provide care to patients at high risk for complications of influenza, achieving high rates of vaccination among HCP will reduce disease burden and healthcare costs.

Influenza is readily transmitted for 24 hours before a person develops influenza symptoms. That means symptom-free unvaccinated HCP can transmit influenza virus to patients before developing symptoms and electing to stay home as a way to prevent transmission.

Why does CDC recommend that we consider obtaining a signed declination from HCP who refuse influenza vaccination?

Some studies have shown an increase in HCP influenza vaccine acceptance when decliners are required to sign such a statement. In addition, such statements can help a vaccination program assess the reasons for declination and plan future educational efforts.

Here is a link to IAC’s sample influenza vaccination declination form: www.immunize.org/catg.d/p4068.pdf.

Please tell me which professional associations have endorsed mandatory influenza vaccination for HCP and have created policy statements to that effect.

The following professional associations have issued policy statements supporting mandatory HCP influenza vaccination:

- American Academy of Family Physicians www.aafp.org/online/en/home/clinical/immunizationres/influenza/mandatoryinfluenza.html
- American Academy of Pediatrics <http://pediatrics.aappublications.org/content/early/2010/09/13/peds.2010-2376.abstract>
- American College of Physicians www.acponline.org/clinical_information/resources/adult_immunization/flu_hcw.pdf
- American Hospital Association: www.aha.org/advocacy-issues/tools-resources/advisory/2011/110722-quality-adv.pdf
- American Medical Directors Association www.amda.com/governance/resolutions/J11.cfm
- American Pharmacists Association [click here](#)
- American Public Health Association www.apha.org/advocacy/policy/policysearch/default.htm?id=1410
- Association for Professionals in Infection Control and Epidemiology [click here](#)
- Infectious Diseases Society of America [click here](#)
- Society for Healthcare Epidemiology of America www.jstor.org/stable/10.1086/656558

You can find additional information about mandatory influenza vaccination for HCP, including a list of more than 100 healthcare settings that have implemented mandatory vaccination programs. Access IAC’s Honor Roll for Patient Safety web section at www.immunize.org/honor-roll.

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