NEEDLE TIPS

Visit www.immunize.org for up-to-date immunization information from the Immunization Action Coalition

What's Inside?

Ask the Experts
IAC's 10 Most Visited Web Sections
Vaccine Highlights: Recommendations,
licensures
Emergency Warning Signs for People with
Influenza
Pregnant Women and the Flu
Novel H1N1: What you need to know 8
Standing Orders for Administering
H1N1 Vaccine10
Influenza Products for the 2009–10
Influenza Season11
Declination of Seasonal Influenza Vaccination 12
Declination of H1N1 Influenza Vaccination13
Order Essential Immunization Resources
from IAC14

What's new with Needle Tips?

For 15 years, we've printed and mailed *Needle Tips* to you twice a year, but in the future, you'll receive issues more often because *Needle Tips* is now an online-only publication. *Needle Tips* will continue to bring you the same great content—Ask the Experts with answers written by CDC experts, Vaccine Highlights, ready-to-copy immunization educational materials, and more. This issue focuses on a single vaccine topic—influenza (both H1N1 and seasonal). Some future issues will also concentrate on a single topic; others will include a range of topics.

This issue includes not only materials developed by us at the Immunization Action Coalition (IAC) but also excellent materials from three of our partners: an H1N1 influenza educational piece from the Vaccine Education Center at The Children's Hospital of Philadelphia and a piece for pregnant women developed by the American College of Obstetricians and Gynecologists and the American Medical Association. Like the rest of the content of *Needle Tips*, these pieces from our partners are copyright-free and ready for you to copy and distribute to others.

Here's something you might not know about our Ask the Experts Q&As. In addition to the Q&As in this issue, you'll find more than 1,000 posted for your use on the IAC website. To access them, go to www.immunize.org/askexperts. Pick the Q&As you find the most helpful. Feel free to copy and distribute them widely, either in your newsletter or by other means. All we ask is that you cite IAC and CDC as the sources of these materials (for instructions on citing IAC, visit www.immunize.org/citeiac).

Finally, be sure you're subscribed to *Needle Tips* so you receive email notification of new issues as soon as they're available online. Subscribe at www.immunize.org/subscribe.

Ask the Experts

IAC extends thanks to our experts, William L. Atkinson, MD, MPH, and Andrew T. Kroger, MD, MPH, medical epidemiologists at the National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention (CDC).

Seasonal & H1N1 influenza

Can anyone who wants it now receive H1N1 influenza vaccine?

Currently, each state can determine which people can receive H1N1 vaccine. As of this writing, an increasing number of states have decided to give the vaccine to whomever wants it. Check with your local or state health department to find out the people who are eligible to receive the H1N1 vaccine in your region.

According to ACIP, individuals ages 25–64 years with medical conditions that put them at higher risk for influenza-related complications

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)

are among those prioritized to receive H1N1 influenza vaccine. What exactly are these high-risk conditions?

A footnote on page 5 of the ACIP recommendations for use of H1N1 influenza vaccine (www.cdc.gov/mmwr/PDF/rr/rr5810.pdf) defines these medical conditions as follows: "Chronic medical conditions that confer a higher risk for influenza-related complications include chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, cognitive, neurologic/neuromuscular, hematologic, or metabolic disorders (including diabetes mellitus) or immunosuppression (including immunosuppression caused by medications or by human immunodeficiency virus)."

People 65 years and older are not among CDC's initial target groups for H1N1 vaccine. Our hospital is refusing to give H1N1 vaccine to healthcare personnel who are 65 and older. Is this correct?

This is not correct. People 65 years or older who are healthcare personnel, or who live with or care for an infant younger than age 6 months, are among those prioritized to receive H1N1 vaccine.

Can we administer both the seasonal and H1N1 influenza vaccines at the same visit?

You can in most cases. See the points below.

- You can administer both the inactivated seasonal and the inactivated H1N1 influenza vaccines at the same visit (using separate syringes and sites). Also, you can administer them at any time before or after each other.
- You can administer the inactivated seasonal and the live H1N1 influenza vaccines together or at

- any time before or after each other.
- You can administer the live seasonal and the inactivated H1N1 influenza vaccines together or at any time before or after each other.
- Administering both the LIVE attenuated seasonal and the LIVE attenuated H1N1 influenza vaccines at the same visit is NOT recommended because of concerns about competition between the two live vaccine viruses. If you have only live seasonal influenza vaccine and live H1N1 influenza vaccine available, you should separate the doses of the two live vaccines by at least 4 weeks.

If seasonal live attenuated influenza vaccine (LAIV) and 2009 H1N1 LAIV are mistakenly given during the same visit, do either or both doses need to be repeated?

There are no data on the administration of seasonal LAIV and 2009 H1N1 LAIV during the same visit. ACIP recommends that seasonal LAIV and 2009 H1N1 LAIV not be administered during the same visit. However, if both types of LAIV are inadvertently administered during the same visit, neither vaccine needs to be repeated.

What if seasonal LAIV and 2009 H1N1 LAIV are given less than 28 days apart?

ACIP recommends a minimum interval of 28 days (4 weeks) between use of a seasonal LAIV and a 2009 H1N1 LAIV because these are considered two different live vaccines. Based on previous studies of LAIV replication and immune response, however, a dosing interval as short as 14 days (2

(continued on page 3)

Needle Tips

Online at www.immunize.org/nt Immunization Action Coalition

1573 Selby Avenue, Suite 234 St. Paul, MN 55104 Phone: (651) 647-9009 Fax: (651) 647-9131

Email: admin@immunize.org Websites: www.immunize.org www.vaccineinformation.org www.izcoalitions.org

Needle Tips is a publication of the Immunization Action Coalition (IAC) written for health professionals. Content is reviewed by the Centers for Disease Control and Prevention (CDC) for technical accuracy. This publication is supported in part by CDC Grant No. 5U38IP000290. The content is solely the responsibility of IAC and does not necessarily represent the official views of CDC. ISSN 1944-2017.

Publication Staff

Editor: Deborah L. Wexler, MD
Associate Editor: Diane C. Peterson
Managing Editor: Dale Thompson
Contributing Editor: Lisa H. Randall, JD
Editorial Asst.: Janelle Tangonan Anderson
Consultants: Teresa A. Anderson, DDS, MPH
Linda A. Moyer, RN, and Mary Quirk
Layout: Kathy Cohen
Website Design: Sarah Joy

IAC Staff

Assistant to the Director: Becky Payne Office Administrator: Robin VanOss Administrative Asst.: Susan Broadribb

IAC publishes a free email news service (IAC Express) and two free periodicals (Needle Tips and Vaccinate Adults). To subscribe to any or all of them, go to www.immunize.org/subscribe.

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

Needle Tips is also supported in part by

sanofi pasteur • Merck & Co., Inc.
GlaxoSmithKline • Novartis Vaccines
Wyeth Pharmaceuticals • CSL Biotherapies
MedImmune, Inc. • Baxter Healthcare Corp.
American Pharmacists Association
Mark and Muriel Wexler Foundation
Anonymous

IAC maintains strict editorial independence in its publications.

IAC Board of Directors

Kristen Ehresmann, RN, MPH Minnesota Department of Health

Neal Holtan, MD, MPH

St. Paul-Ramsey County Public Health

Anne Kuettel, PHN St. Paul-Ramsey County Public Health

> Cindy Uldrich UnitedHealthcare Corporation

Deborah L. Wexler, MD Immunization Action Coalition

Check out IAC's 10 Most Visited Web Sections

More than 3 million visitors have already accessed www.immunize.org during 2009

To discover why the Top 10 sections are so popular with healthcare professionals, read the section descriptions below and click on the links provided.

Immunization Action Coalition Home Page www.immunize.org

The home page has it all: links to the Top 10 sections, as well as to the latest vaccine information and to practical, clinically relevant im-

munization materials.

Educational Print Materials

www.immunize.org/printmaterials

Our 250 information sheets for healthcare professionals and the public are free, ready-to-copy, and reviewed for technical accuracy by experts at CDC. Many are available in translation. Don't miss IAC's Standing Orders for administering vaccines to children and adults.

For access to our educational materials, go to the following sections:

- Most Popular Print Materials
- Clinic Procedures
- Diseases & Vaccines
- Alphabetical by Title
- Standing Orders

Vaccine Information Statements (VISs)

www.immunize.org/vis

The VIS section includes all VISs published in the U.S. and offers VISs in more than 40 languages.

- VISs by Vaccine
- VISs by Language
- VISs Alphabetical by Disease

Subscribe to IAC's Online Publications

www.immunize.org/subscribe

- *IAC Express*, a free electronic digest of immunization news and information, is delivered to subscribers' email in-boxes at least once a week.
- Needle Tips and Vaccinate Adults are essential online publications for healthcare professionals who provide vaccination services.

Ask the Experts

www.immunize.org/askexperts

Experts from the Centers for Disease Control and Prevention (CDC) answer challenging and timely questions about vaccines and their administration. These Q&As have been featured in issues of *IAC Express, Needle Tips*, and *Vaccinate Adults*.

Vaccine Concerns www.immunize.org/concerns

IAC's Vaccine Concerns web section provides healthcare professionals with background information and practical resources that will help them discuss immunization with concerned parents and patients.

Vaccine Policy and Licensure

www.immunize.org/vacpolicy

This section brings together vaccine recommendations, policy papers, and licensing information from CDC's Advisory Committee on Immunization Practices, the

American Academy of Pediatrics, Food and Drug Administration, the Institute of Medicine, and the World Health Organization.

Unprotected People Reports

www.immunize.org/reports

This collection of more than 100 personal testimonies, case summaries, and articles about people who have suffered or died from vaccine-preventable diseases provides compelling reasons to vaccinate.

State Information

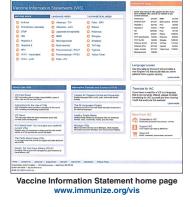
www.immunize.org/stateinfo

IAC provides direct links to state immunization websites, tables and maps of state immunization mandates, and contact information for local, state, and territory immunization coordinators.

Directory of Immunization Resources

www.immunize.org/resources

IAC's Immunization Resources section brings together helpful resources from government, professional associations, nonprofit organizations, industry, and others.



DISCLAIMER: Needle Tips is available to all readers free of charge. Some of the information in this issue is supplied to us by the Centers for Disease Control and Prevention in Atlanta, Georgia, and some information is supplied by third-party sources. The Immunization Action Coalition (IAC) has used its best efforts to accurately publish all of this information, but IAC cannot guarantee that the original information as supplied by others is correct or complete, or that it has been accurately published. Some of the information in this issue is created or compiled by IAC. All of the information in this issue is of a time-critical nature, and we cannot guarantee that some of the information is not now outdated, inaccurate, or incomplete. IAC cannot guarantee that reliance on the information in this issue will cause no injury. Before you rely on the information in this issue, you should first independently verify its current accuracy and completeness. IAC is not licensed to practice medicine or pharmacology, and the providing of the information in this issue does not constitute such practice. Any claim against IAC must be submitted to binding arbitration under the auspices of the American Arbitration Association in Saint Paul, Minnesota.

weeks) might be sufficient to allow for an appropriate immune response to both vaccines. Therefore, an interval of 2 weeks or more between these two live vaccines is considered acceptable. However, if a dose of seasonal LAIV and a dose of H1N1 LAIV are administered 1-13 days apart, the LAIV vaccine that was given last should be considered invalid and should be repeated 28 days after the invalid dose. An interval of 14 days between administering the invalid dose and the repeat dose is acceptable, however. See the previous question for guidance about what to do if two doses of LAIV are inadvertently given on the same day.

What is the recommended spacing between doses for a child who requires 2 doses of H1N1 influenza vaccine?

The first and second doses of either the live or the inactivated H1N1 vaccine should be separated by at least 28 days. See the paragraphs below:

Spacing when giving 2 doses of live H1N1 vaccine to a child: If 2 doses of live H1N1 influenza vaccine (nasal spray) are given less than 28 days apart, but at least 14 days apart, count the doses as valid. If 2 doses of live H1N1 influenza vaccine are given 1-13 days apart, the second dose is invalid. Give the repeat dose at least 14 days (preferably 28 days) after the invalid

Spacing when giving 2 doses of inactivated H1N1 vaccine to a child: If 2 doses of inactivated H1N1 influenza vaccine are given less than 28 days apart, but at least 21 days apart, count the doses as valid. If 2 doses of inactivated H1N1 influenza vaccine are given 1-20 days apart, the second dose is invalid. Give the repeat dose at least 21 days (preferably 28 days) after the invalid dose.

Can a child who requires 2 doses of a 2009 H1N1 influenza vaccine, and who was given an inactivated H1N1 vaccine for the first dose, complete the series with a live H1N1 vaccine? Or vice versa?

Data describing the immune response to mixed schedules are limited. Therefore, when feasible, the same type of vaccine (either live attenuated vaccine OR inactivated vaccine) should be used in a 2-dose schedule. Mixed schedules, however, are preferable to not completing the series. A 28-day interval between 2 doses of a mixed inactivated/live H1N1 vaccine series is recommended, but a 21-day interval is acceptable. If the vaccines are separated by 1-20 days, the second dose is invalid. Give the repeat dose 28 days (21 days acceptable) after the invalid dose was given.

What if seasonal LAIV or H1N1 LAIV is given 2 weeks after a dose of varicella vaccine or MMR? Does the dose of LAIV need to be repeated?

Yes. The general rule for spacing two live virus vaccines is that if two live virus vaccines are administered less than 4 weeks apart and not on the same day, the vaccine given second should be considered invalid and repeated. The repeat dose should be administered at least 4 weeks after the invalid dose. The two exceptions to this guidance are (1) that live H1N1 and live seasonal influenza vaccines should not be given on the same day and (2) that the minimum interval between seasonal LAIV and H1N1 LAIV is 14 days.

Can a person with a runny nose receive LAIV vaccine?

Yes.

Can 2009 H1N1 vaccine be administered at the same visit as other vaccines?

Inactivated 2009 H1N1 vaccine can be administered at the same visit as any other vaccine, including pneumococcal polysaccharide vaccine. Live 2009 H1N1 vaccine can be administered at the same visit as any other live or inactivated vaccine EXCEPT seasonal live attenuated influenza vaccine.

In the package inserts, the age range for children who need 2 doses is different for seasonal (6 months through 8 years) and 2009 H1N1 monovalent vaccine (6 months through 9 years). Does CDC recommend that clinicians follow the recommendation in the package inserts?

Yes, CDC recommends that clinicians follow the guidance in the manufacturer package inserts. For 2009 H1N1 monovalent vaccines, that means that clinicians should administer 2 doses of 2009 H1N1 monovalent vaccine to children ages 6 months through 9 years. Persons 10 years and older should receive 1 dose.

If a child receives his first dose of H1N1 vaccine at age 9 years, but is 10 years old when he comes back for the second dose, should the second dose

According to CDC recommendations, if a child turns 10 years old between the first and second doses of H1N1 vaccine, the second dose is not necessary.

Can the two types of LAIV vaccine be given to close contacts of pregnant women?

Yes. A pregnant woman can be in close contact with someone who has received LAIV vaccine for either H1N1 or seasonal influenza. In addition, a pregnant healthcare worker can administer both LAIV vaccines to patients. Because the viruses in these vaccines are attenuated or weakened, vaccine viruses are unlikely to cause any illness symptoms, even if an unvaccinated person inadvertently gets vaccine viruses in their nose. The LAIV vaccine for seasonal influenza viruses has been used in millions of school children and healthy adults since it was licensed, and there have been no reports of pregnant women becoming ill after exposure to their vaccinated children or other family members.

Although both LAIV vaccines can be given to contacts of pregnant women, pregnant women should not receive either of the LAIV vaccines.

Are there any contraindications to giving breastfeeding mothers the 2009 H1N1 vaccine?

Breastfeeding mothers can get either live or inactivated H1N1 influenza vaccine. They can also receive either live or inactivated seasonal influenza vaccine. As noted elsewhere, seasonal and H1N1 LAIV vaccines should not both be given at the same visit.

What can I say to patients who think the H1N1 influenza vaccines are "new" or experimental?

The 2009 H1N1 influenza vaccines are being produced by the same companies using the same procedures used to produce seasonal influenza vaccines. The 2009 H1N1

(continued on page 16)

Advisory Board

Liaisons from Organizations

Bernadette A. Albanese, MD, MPH Council of State & Territorial Epidemiologists William L. Atkinson, MD, MPH Nat'l Ctr. for Immun. & Resp. Diseases, CDC Anna DeBlois Buchanan, MPH Assn. of State & Territorial Health Officials Stephen L. Cochi, MD, MPH Nat'l Ctr. for Immun. & Resp. Diseases, CDC Lawrence J. D'Angelo, MD, MPH

Society for Adolescent Medicine Paul Etkind, DrPH, MPH

Nat'l. Assn. of County & City Health Officials Stanley A. Gall, MD

Amer. College of Obstetricians & Gynecologists Bruce Gellin, MD, MPH

National Vaccine Program Office, DHHS

Neal A. Halsey, MD Institute for Vaccine Safety, Johns Hopkins Univ.

Claire Hannan, MPH Association of Immunization Managers

Carol E. Hayes, CNM, MN, MPH American College of Nurse-Midwives

Gregory James, DO, MPH, FACOFP American Osteopathic Association

Samuel L. Katz, MD Pediatric Infectious Diseases Society

Mary Beth Koslap-Petraco, RN-CS, CPNP National Assn. of Pediatric Nurse Practitioners

Marie-Michele Leger, MPH, PA-C

American Academy of Physician Assistants Harold S. Margolis, MD

Pediatric Dengue Vaccine Initiative

Martin G. Myers, MD National Network for Immunization Information

Kathleen M. Neuzil, MD, MPH American College of Physicians

Paul A. Offit, MD Vaccine Education Ctr., Children's Hosp. of Phila.

Mitchel C. Rothholz, RPh, MBA American Pharmacists Association

Thomas N. Saari, MD

American Academy of Pediatrics

William Schaffner, MD Infectious Diseases Society of America

Anne Schuchat, MD Nat'l Ctr. for Immun. & Resp. Diseases, CDC

Thomas E. Stenvig, RN, PhD American Nurses Association

Litien Tan, PhD

American Medical Association John W. Ward, MD

Division of Viral Hepatitis, NCHHSTP, CDC Patricia N. Whitley-Williams, MD, MPH

National Medical Association Walter W. Williams, MD, MPH

Office of Minority Health, CDC Individuals

Hie-Won L. Hann, MD Jefferson Medical College, Philadelphia, PA

Mark A. Kane, MD, MPH Consultant, Seattle, WA

Edgar K. Marcuse, MD, MPH University of Washington School of Medicine

Brian J. McMahon, MD Alaska Native Medical Center, Anchorage, AK

Walter A. Orenstein, MD Bill & Melinda Gates Foundation

Stanley A. Plotkin, MD Vaxconsult.com

Gregory A. Poland, MD Mayo Clinic, Rochester, MN

Sarah Jane Schwarzenberg, MD University of Minnesota

Coleman I. Smith. MD

Minnesota Gastroenterology, Minneapolis, MN Richard K. Zimmerman, MD, MPH

University of Pittsburgh

Vaccine Highlights

Recommendations, schedules, and more

Editor's note: The information in "Vaccine Highlights" is current as of December 22, 2009.

Influenza vaccine news

On Dec. 15, CDC's Health Alert Network (HAN) issued a Health Update announcing the non-safety related voluntary recall of certain lots of sanofi pasteur's pediatric H1N1 monovalent influenza vaccine that are intended for use in children age 6 months through 35 months. During routine testing, sanofi found four distributed lots of its single-dose 0.25mL pre-filled syringe vaccine had antigen content lower than the required potency levels. Though the antigen content of these lots is below the specification limit, CDC and FDA are in agreement that the small decrease in antigen content is unlikely to result in a clinically significant reduction in immune response among people who have received the vaccine. For this reason there is no need to revaccinate people who have received vaccine from these lots, even if both doses were from one of the recalled lots. To read the HAN announcement, go to www2a.cdc.gov/han/archivesys/viewmsgv.asp?alertnum=00303.

On Oct. 2, CDC released its VIS for the 2009 H1N1 inactivated influenza vaccine (injectable) and its VIS for the 2009 H1N1 live attenuated influenza vaccine (nasal spray). To access the VIS for injectable H1N1 influenza vaccine in English and numerous other languages, go to www.immunize.org/vis/ vis_h1n1inactive.asp. To access the VIS for H1N1 live attenuated influenza vaccine in English and numerous other languages, go to www.immunize. org/vis/vis_h1n1live.asp.

On Sept. 15, FDA approved four vaccines for protection against the 2009 H1N1 influenza virus. The vaccines are made by CSL Biotherapies, MedImmune, Novartis Vaccines, and sanofi pasteur. On Nov. 10, FDA approved a fifth 2009 H1N1 influenza vaccine; it is made by ID Biomedical and distributed by GSK.* To access package inserts for all five 2009 H1N1 influenza vaccines, go to www.immunize.org/packageinserts/pi_h1n1.asp.

* See page 11 for details about influenza vaccine products.

Who grants a fish's wish? Its fairy cod-mother. On Nov. 10, FDA approved the expansion of the age indication for both of CSL's inactivated influenza vaccines: the seasonal formulation (Afluria) and the 2009 H1N1 formulation. These two vaccines are now approved for use in people age 6 months and older; previously, they were licensed only for use in people age 18 years and older.* To access the package insert for the seasonal formulation, go to www.immunize.org/packageinserts/ pi_influenza.asp. To access the package insert for the H1N1 formulation, go to www.immunize.org/ packageinserts/pi_h1n1.asp.

On Oct. 19, FDA approved the expansion of the age indication for GSK's inactivated seasonal influenza vaccine, Fluarix, to include its use in people age 3 and older. Previously, it was approved for use in adults age 18 years and older.* To access the package insert, go to www.immunize.org/packageinserts/pi_influenza.asp.

On Nov. 27, FDA approved Agriflu (Novartis), an inactivated seasonal influenza virus vaccine indicated for immunization of adults age 18 years and older.* To access the package insert, go to www. immunize.org/packageinserts/pi_influenza.asp.

In the October 2009 issue of Pediatrics, AAP published "Policy Statement-Recommendations for the Prevention and Treatment of Influenza in Children, 2009-2010." To access it, go to http:// aappolicy.aappublications.org/cgi/reprint/pediatrics:124/4/1216.

HPV vaccine news

On Dec. 1, CDC issued provisional recommendations for human papillomavirus (HPV) vaccine, which include recommendations for use of Gardasil (Merck) in females and males and for the use of Cervarix (GSK) in females. The provisional recommendations are available at www.cdc.gov/ vaccines/recs/provisional.

On Oct. 21, ACIP voted approval for a Vaccines For Children (VFC) resolution for HPV vaccines that (1) adds the bivalent HPV vaccine Cervarix to the previous HPV VFC resolution and (2) allows permissive use of the quadrivalent HPV vaccine Gardasil for VFC-eligible males ages 9 through 18 years. To access the updated HPV vaccine VFC resolution, go to www.cdc.gov/vaccines/programs/ vfc/downloads/resolutions/1009hpv-508.pdf.

On Oct.16, FDA approved Cervarix (GSK), a bivalent vaccine to prevent cervical cancer and precancerous lesions caused by HPV. It is approved for use in females ages 10 through 25 years. To access the package insert, go to www.immunize. org/packageinserts/pi_hpv.asp.



On Oct. 16, FDA approved a new indication for the use of Gardasil vaccine (Merck); it can now be used in males ages 9 through 26 years to prevent genital warts caused by HPV. The vaccine was approved earlier for use in females ages 9 through 26 years for the prevention of cervical, vulvar and vaginal cancer, precancerous lesions, and genital warts caused by HPV. To access the package insert, go to www.immunize.org/packageinserts/pi_hpv.asp.

MMR & MMRV vaccine news

On Oct. 21, Merck posted a letter to healthcare providers on its website stating that based on input from ACIP, professional societies, scientific leaders, and customers, Merck has decided not to resume distribution of its monovalent measles, mumps, and rubella vaccine products. To read the letter, go to www.merckvaccines. com/monovalentMessage_102109.pdf.

Related to this, CDC posted "Q&As about Monovalent M-M-R Vaccines" on its Vaccines Shortages & Delays web page. To access the Q&As, go to www.cdc.gov/vaccines/vac-gen/Shortages/mmr-faq-12-17-08.htm.

On Oct. 20, CDC issued provisional recommendations for the use of measles, mumps, rubella, and varicella vaccine (MMRV). The recommendations provide updated information on the use of MMRV vaccine and also provide CDC implementation guidance. The provisional recommendations are available at www.cdc.gov/vaccines/recs/provisional.

Looking for just-published VISs or ACIP vaccine recommendations? Find official documents fast at www.immunize.org/newreleases

Meningococcal vaccine news

On Sept. 25, CDC published updated ACIP recommendations for revaccinating people at prolonged increased risk for meningococcal disease. People who were previously vaccinated with either meningococcal conjugate vaccine (MCV) or meningococcal polysaccharide vaccine (MPSV) and who remain at increased risk should be revaccinated. For high-risk people who were first vaccinated at ages 2 through 6 years, give MCV 3 years after first vaccination. For high-risk people who were previously vaccinated at age 7 years or older, give MCV 5 years after previous vaccination. People whose only risk factor is living in on-campus housing are not recommended to receive an additional dose. To read the complete updated recommendations, go to www.cdc.gov/mmwr/preview/mmwrhtml/ mm5837a4.htm.

Hepatitis A vaccine news

On Sept. 18, CDC published updated ACIP recommendations that call for hepatitis A vaccination for all previously unvaccinated people who anticipate having close contact with an international adoptee within 60 days of the adoptee's arrival in the U.S. when the adoptee is from a country that has high or intermediate hepatitis A endemicity. To read the complete updated recommendations, go to www.cdc.gov/mmwr/preview/mmwrhtml/mm5836a4.htm.

Hib vaccine news

On Sept. 18, CDC published ACIP recommendations on the use of the newly licensed Hib vaccine Hiberix (GSK) and guidance on Hib booster dose administration based on increasing vaccine supplies. Hiberix is licensed for use as the booster (final) dose for Hib vaccination for children ages 15 months through 4 years who have received a primary Hib vaccination series; the ACIP recommendations allow its use in children as young as

age 12 months. To read the complete updated recommendations, go to www.cdc.gov/mmwr/preview/mmwrhtml/mm5836a5.htm.

Pneumococcal vaccine news

On Nov. 16, CDC's Health Alert Network (HAN) issued a Health Advisory titled "Pneumococcal Vaccination Recommended to Help Prevent Secondary Infections." The advisory summarizes the ACIP pneumococcal recommendations and explains that CDC is receiving reports of greater-than-expected numbers of cases of invasive pneumococcal disease coincident with increases in influenza-associated hospitalizations. While recommendations for the use of pneumococcal polysaccharide vaccine have not changed, clinicians should increase their efforts to vaccinate persons with underlying medical conditions that increase their risk of pneumococcal disease, particularly people younger than age 65 years. To access the HAN Health Advisory, go to www2a.cdc.gov/HAN/ArchiveSys/ViewMsgV. asp?AlertNum=00301. IAC has developed an educational piece for healthcare professionals about recommendations for the use of pneumococcal polysaccharide vaccine. It's available online at www.immunize.org/catg.d/p2015.pdf.

On Oct. 6, CDC released an updated VIS for pneumococcal polysaccharide vaccine (PPSV). To access it, go to www.immunize.org/vis/vis_ppsv.asp.

Zoster vaccine news

On Oct. 6, CDC released an updated VIS for zoster (shingles) vaccine. To access it, go to www.immunize.org/vis/shingles.pdf.

Yellow fever vaccine news

On Dec. 9, CDC issued provisional recommendations for the use of yellow fever vaccine in people ages 9 months and older who (1) travel to or live in countries in South America or Africa where yellow fever transmission is known to occur or (2) require proof of vaccination for country entry. The provisional recommendations are available at www.cdc. gov/vaccines/recs/provisional.

Anthrax vaccine news

On Oct. 5, CDC issued provisional recommendations for the use of anthrax vaccine adsorbed, which include recommendations for pre-event vaccination and for post-exposure prophylaxis. The provisional recommendations are available at www.cdc.gov/vaccines/recs/provisional.

Rabies vaccine news

On Oct. 6, CDC released an updated VIS for rabies vaccine. To access it, go to www.immunize.org/vis/rabies06.pdf.

CDC news

The 2010 immunization schedules for children and adolescents will be published in *MMWR* on January 8, 2010, and will be posted on the CDC website the same day (www.cdc.gov/vaccines/recs/schedules). The 2010 adult schedule will be published in *MMWR* on January 15 and will also appear on the CDC website at that time. Shortly thereafter, IAC will produce laminated versions of both immunization schedules and make them available for purchase on its website at www.immunize.org/shop.

In October, HHS announced the launch of a redesigned website for the Vaccine Adverse Event Reporting System (VAERS). To access the new site, go to http://vaers.hhs.gov.

On Aug. 14, CDC published a Notice to Readers about the final 2008 reports of nationally notifiable infectious diseases. The data will be published in more detail in the upcoming Summary of Notifiable Diseases—United States, 2008. To access the Notice to Readers, go to www.cdc.gov/mmwr/preview/mmwrhtml/mm5831a5.htm.

Looking for free educational materials you can copy for patients and staff? Visit the Immunization Action Coalition's website at

www.immunize.org/printmaterials

Current VIS dates

The use of most Vaccine Information Statements (VISs) is mandated by federal law. Listed below are the dates of the most current VISs. Check your stock of VISs against this list. If you have outdated VISs, print current ones from one of these sources: CDC's website at www.cdc.gov/vaccines/pubs/vis (has VISs in English) or IAC's website at www.immunize.org/vis (has VISs in more than 30 languages).

DTaP/DT/DTP5/17/07	MMR3/13/08
Hepatitis A3/21/06	PCV12/9/08
Hepatitis B7/18/07	PPSV 10/6/09
Hib12/16/98	Polio1/1/00
HPV (H. papillomavirus)2/2/07	Rabies 10/6/09
H1N1 (inactivated)10/2/09	Rotavirus 8/28/08
H1N1 (LAIV)10/2/09	Shingles 10/6/09
Influenza (LAIV)8/11/09	Td/Tdap 11/18/08
Influenza (TIV)8/11/09	Typhoid 5/19/04
Japan. enceph5/11/05	Varicella 3/13/08
Meningococcal 1/28/08	Yellow fever 11/9/04

Multi-vaccine VIS......9/18/08 (for 6 vaccines given to infants/children: DTaP, IPV, Hib, HepB, PCV, RV)

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 seasonal or H1N1 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
- Fever with rash

Emergency warning signs for adults with seasonal or H1N1 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!

Adapted from the Centers for Disease Control and Prevention $www.flu.gov/pdfs/emergency warning signs.pdf \ and \ www.flu.gov/individual family/parents$

Technical content reviewed by the Centers for Disease Control and Prevention, December 2009.

Pregnant Women and the Flu

This 2009–2010 influenza season, there are two different types of flu to avoid—2009 H1N1 ("swine flu") and seasonal flu. If you are pregnant, the flu can be very serious for both you and your baby. Some pregnant women sick with H1N1 flu have had early labor and severe pneumonia. Some have been hospitalized and some have died.

Signs and symptoms of the flu. Symptoms include fever (100°F or higher), cough, or sore throat. Other symptoms include runny nose, body aches, chills, headache, fatigue, and occasionally diarrhea and vomiting.

The best way to prevent the flu. Get vaccinated for both H1N1 flu and seasonal flu. Both flu shots are safe. Both protect your newborn from getting the flu. Babies younger than 6 months old cannot get the flu shot.

If you think you have the flu. If you have flu symptoms, take it very seriously. Contact your pregnancy care provider immediately so that flu medications can be started and further instructions given by your provider. If you have a fever, you should begin taking acetaminophen (Tylenol®) right away and follow instructions from your pregnancy care provider.

Go immediately to the emergency room if you have any of these signs:

- You have difficulty breathing.
- You have pressure or pain in your chest, other than pain when you cough.
- You are unable to keep liquids down.
- You were recovering from the flu and are now sicker.
- Others think you are becoming confused or less alert.
- You are dizzy when standing.

If you come in close contact with someone who has the flu. Contact your pregnancy care provider right away. You may need medicine to reduce your chances of getting the flu.

How to prevent getting sick. Wash your hands often with soap and water. If soap and water are not available, use alcohol-based hand rub. Avoid touching your nose, mouth, or eyes. Cough or sneeze into a tissue or sneeze into your sleeve. Throw the tissue in the trash. Stay away from sick people. Have a plan for someone else to take care of a sick family member.

Additional information and updates regarding pregnant women and the flu are available at:

ACOG

http://www.acog.org/departments/dept_notice.cfm?recno=20&bulletin=4866

http://www.cdc.gov/h1n1flu/pregnancy

AMA

www.amah1n1info.org

October 20, 2009 The American College of Obstetricians and Gynecologists
The American Medical Association





Safety of Flu Vaccines

Some pregnant women are concerned about the safety of the 2009 H1N1 flu and seasonal flu vaccines. Both flu vaccines are safe. Vaccination is one of the most important things that you can do for yourself and your baby. Vaccination is safe for you and your baby. Both shots protect your baby from getting the flu. Your baby cannot get the flu shot until 6 months of age. The seasonal flu vaccine has been given safely to millions of pregnant women over the past 45 years. Flu shots have not been shown to cause harm to pregnant women or their babies. The 2009 H1N1 flu vaccine is made the same way as the seasonal flu vaccine. The type of mercury used in some vaccines has not been shown to be harmful to a pregnant woman or her unborn baby. Mercury has not been found to cause autism. However, if you are still concerned, there is an H1N1 shot without mercury [may or may not be available in your area]. The risk for a pregnant woman and her unborn baby of getting sick with the flu is far greater than being vaccinated.

If you did not get the flu vaccines during pregnancy, you should still get them even if you are breastfeeding. This will help prevent you and your baby from getting the flu.

Who Should Not Be Vaccinated

There are some people who should not get any flu vaccine without first consulting a physician. These people include

- people who have a severe allergy to chicken eggs.
- people who have had a severe reaction to an influenza vaccination.
- people who developed Guillain-Barré syndrome within 6 weeks of getting an influenza vaccine previously.
- children younger than 6 months of age (influenza vaccine is not approved for this age group).
- people who have a moderate-to-severe illness with a fever (they should wait until they recover to get vaccinated).



Novel H1N1: What you should know

The Children's Hospital of Philadelphia®

VACCINE EDUCATION CENTER

In April 2009 a strain of influenza virus entered the United States that worried public health officials. The strain has variously been labeled "swine flu," "H1N1," "novel H1N1," and "pandemic H1N1." Health officials were concerned that this particular virus has the potential to infect virtually everyone in the world.

Q. Why are public health officials worried about novel H1N1?

A. Health officials are concerned because very few people in the world have immunity to novel H1N1. This means that the virus has the capacity to cause a pandemic, which is a worldwide epidemic. Typically, many more people become ill and die during pandemics than during yearly, seasonal epidemics of influenza. Some pandemics are more damaging than others. For example, the pandemics of 1957 and 1968 killed 4 million and 6 million people, respectively. On the other hand, the pandemic of 1918 killed between 20 million and 50 million people.

Q. Where did this novel H1N1 virus come from?

A. Novel H1N1 virus was created in nature. Influenza viruses, like all viruses, reproduce themselves in cells. But influenza doesn't just grow in human cells; it also can grow in cells of pigs and birds. When two or three different influenza viruses grow in the same cell, they can exchange genetic material, creating an entirely new virus. The current H1N1 virus is a combination of bird, human and pig influenza strains. Because it's new, virtually no one has immunity to this strain.

Q. What does H1N1 mean?

A. Influenza viruses have two proteins that sit on their surface: the hemagglutinin (H) and neuraminidase (N). These particular proteins are important in inducing antibodies that protect people against disease. Influenza viruses may contain many different combinations of H and N proteins. For this reason, all influenza strains are labeled by the types of H and N proteins on their surface (e.g., H1N1, H3N2).

Q. Why is the new strain called "novel H1N1" instead of just H1N1?

A. This new strain is very different from the H1N1 influenza viruses that circulate in the United States every year. Every year health officials in the United States recommend an influenza vaccine that includes three different influenza strains to protect against those most likely to cause disease. H1N1 viruses are typically included in the vaccine every year. To distinguish the current strain from the H1N1 viruses that typically circulate, the term "novel H1N1" is used.

Q. Why is this new strain occasionally called "swine flu"?

A. Some of the new virus's genes were derived from pigs. However, most of the genes of the virus were derived from birds and humans. Novel H1N1 virus does not cause disease in pigs and isn't spread from pig to pig; so, to some extent, the term "swine flu" is a misnomer. Also, novel H1N1 is clearly distinct from a strain of swine flu that infected some people in the United States in 1976. That particular virus caused disease in pigs and humans.

Q. Are the symptoms of novel H1N1 infection different from those of typical seasonal flu?

A. No. The symptoms are indistinguishable. All influenza infections include symptoms such as fever, chills, muscle aches, congestion, cough, runny nose and difficulty breathing.

Q. Is novel H1N1 more dangerous than other influenza virus strains?

A. Because novel H1N1 virus will infect more people than other influenza virus strains circulating this winter, it is more dangerous. Every year hundreds of thousands of people are infected with influenza virus. And every year some of those infected will be hospitalized or die. Influenza viruses that are particularly dangerous — like the strain of influenza that caused the 1918 pandemic — cause a greater number of infected people to suffer hospitalization or death. All of the information to date suggests that novel H1N1 is not more virulent than typical seasonal influenza. But, because virtually everyone is susceptible to the virus, more people will get infected with it than with typical seasonal influenza. Indeed, novel H1N1 has already infected more than 1 million people in the United States, causing thousands of hospitalizations and hundreds of deaths.

Q. Is there a vaccine to prevent novel H1N1?

A. Yes. A vaccine to prevent novel H1N1 has been approved for use in the United States. The vaccine is very similar to the current seasonal flu vaccine, except that it contains one vaccine virus instead of three.

more 🕨

vaccine.chop.edu

For the latest information on all vaccines, visit our Web site.

Novel H1N1: What you should know

Q. Who should get the novel H1N1 vaccine?

A. The novel H1N1 vaccine is recommended for people most likely to get severe pneumonia and those who care for them. This includes pregnant women, people between 6 months and 24 years of age, people who care for children less than 6 months of age, healthcare and emergency medical personnel, and people between 25 years and 64 years of age who have chronic medical conditions (like heart, lung or kidney problems) or who are immune compromised.

As vaccine supply increases, it is likely that additional groups will be recommended for immunization.

Q. Why aren't people who are more than 65 years old recommended to receive the novel H1N1 vaccine?

A. Surprisingly, many older citizens appear to be less susceptible to novel H1N1, probably because they have been exposed to a similar virus in the distant past. For this reason, this group is not recommended to receive the novel H1N1 vaccine at this time.

As vaccine supply increases, it is likely that additional groups will be eligible for the vaccine.

Q. Is the novel H1N1 vaccine safe?

A. Yes. The novel H1N1 shot is made using the exact same technology as has been used to make influenza vaccines for more than 60 years. The vaccine virus strain is grown in eggs (because influenza viruses commonly infect birds and, therefore, grow very well in avian cells), purified and treated with the chemical formaldehyde to completely inactivate the virus. The vaccine is then given as a shot and subjected to the same safety testing as seasonal vaccine. Because the virus is completely inactivated it cannot reproduce itself and cannot cause disease.

The nasal spray version of the novel H1N1 vaccine is similar to the seasonal influenza vaccine called FluMist. This is a live form of the virus that is weakened so that it cannot reproduce itself efficiently at body temperature, but can still induce protection.

Although some childhood vaccines contain an adjuvant to enhance immune responses, the novel H1N1 vaccines do not.

Q. Does the novel H1N1 vaccine contain thimerosal?

A. Some multidose preparations of the novel H1N1 vaccine, which could be given to children more than 6 months of age, contain preservative levels of thimerosal. To prevent inadvertent contamination with bacteria, multidose vials of vaccines always contain a preservative. Thimerosal, an ethylmercury-containing preservative, has been used in vaccines since the 1930s. It was added to make multidose vials safer to use.

Although large quantities of mercury can be toxic to the central nervous system, several facts about thimerosal in vaccines are reassuring. First: The quantity of mercury in thimerosal contained in vaccines is less than that to which children are typically exposed in breast milk or infant formula. Second: Many studies have now examined children who received thimerosal-containing vaccines and compared them with children who received the same vaccines that were free of thimerosal; all of these studies found no evidence that thimerosal causes even subtle signs of mercury poisoning.

Q. Are antiviral drugs effective against novel H1N1?

A. Yes. All currently circulating strains of novel H1N1 virus are susceptible to antiviral medicines called oseltamivir (Tamiflu) and zanamivir (Relenza). These medicines are recommended for the following groups of people infected with the virus: people with severe illness and those who are hospitalized; children less than 2 years of age; adults greater than 65 years of age; pregnant women; people with chronic lung, heart or kidney disease; people who are immune compromised; and children receiving long-term aspirin therapy.

The benefit of antiviral medicines to otherwise healthy people with mild H1N1 influenza is minimal.

Q. Other than vaccines and medicines, is there anything else I can do to protect myself and my family during an influenza pandemic?

A. Yes, several simple strategies are effective. Careful hand-washing, covering your mouth when sneezing and staying home for at least one day after the fever is gone will help to reduce the spread of influenza viruses.

This information is provided by the Vaccine Education Center at The Children's Hospital of Philadelphia. The Center is an educational resource for parents and healthcare professionals and is composed of scientists, physicians, mothers and fathers who are devoted to the study and prevention of infectious diseases. The Vaccine Education Center is funded by endowed chairs from The Children's Hospital of Philadelphia. The Center does not receive support from pharmaceutical companies.

©H The Children's Hospital of Philadelphia®

VACCINE EDUCATION CENTER

vaccine.chop.edu

The Children's Hospital of Philadelphia, the nation's first pediatric hospital, is a world leader in patient care, pioneering research, education and advocacy.

Standing Orders for Administering Influenza A (H1N1) 2009 Monovalent Vaccines

Purpose: To reduce morbidity and mortality from pandemic influenza A (H1N1) 2009 virus infection by vaccinating all children and 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 children and adults who meet any of the criteria below.

Procedure:

- 1. Unless local or state conditions and/or vaccine availability specify otherwise, identify children and adults in need of influenza A (H1N1) 2009 monovalent vaccination based on the following priority groups (group a, then b, then c):
 - a. i. Age 6 months through 24 years
 - ii. Age 25 through 64 years with any of the following conditions: chronic pulmonary (including asthma), cardiovascular (excluding hypertension), renal, hepatic, cognitive, neurologic/neuromuscular, hematologic, or metabolic (e.g., diabetes) disorders; immunosuppression, including that caused by medications or HIV; long-term aspirin therapy (applies to a child or adolescent age 6 months through 18 years)
 - iii.Being pregnant during the influenza season
 - iv. All healthcare and emergency medical services personnel
 - v. All adults, children, and teens who are household contacts or caregivers of infants younger than age 6 months.
 - b. All other (e.g., healthy) adults ages 25 through 64 years
 - c. Adults ages 65 years and older
- 2. Screen all patients for contraindications and precautions to influenza vaccine:
 - a. Contraindications: serious reaction (e.g., anaphylaxis) after ingesting eggs or after receiving a previous dose of influenza vaccine or an influenza vaccine component. For a list of vaccine components, 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 pregnant women; children younger than age 2 years; children age 2 through 4 years who have experienced wheezing or asthma within the past 12 months, based on a healthcare provider's statement; children or adults with any of the conditions described in 1.a.ii. above, or to children or adults who received seasonal LAIV at any time within the preceding 4 weeks, including the date of the current visit;
 - 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, close contact with an immunosuppressed person when the person requires protective isolation.
- 3. Provide all patients (or, in the case of a minor, their parent or legal representative) 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 (parent/legal representative). 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 injectable inactivated H1N1 vaccine intramuscularly in the vastus lateralis for infants (and toddlers lacking adequate deltoid mass) or in the deltoid muscle (for older children, and adults). Use a 22–25 g needle. Choose needle length appropriate to the person's age and body mass: infants 6 through 11 mos: 1"; 1 through 2 yrs: 1–11/4"; 3 yrs and older: 1–11/2". Give 0.25 mL for children 6–35 months and 0.5 mL for all others age 3 years and older. (Note: A 5/8" needle may be used for patients weighing less than 130 lbs (<60kg) for injection in the deltoid muscle *only* if the skin is stretched tight, subcutaneous tissue is not bunched, and the injection is made at a 90-degree angle.) Alternatively, healthy, non-pregnant persons ages 2 through 49 years may be given 0.2 mL of intranasal H1N1 LAIV; 0.1 mL is sprayed into each nostril while the patient is in an upright position. Give a second dose of H1N1 vaccine 4 weeks after the first dose to children through 9 years of age.
- 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.
 - 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 novel H1N1 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 or rescinded or until ————————————————————————————————————	of the	ame of practice or clinic) until
Medical Director's signature:	— Effective date:	
Technical content reviewed by the Centers for Disease Control and Prevention, October 2009.	— Effective date.	www.immunize.org/catg.d/p3074b.pdf • Item #P3074b (10/09

Influenza Vaccine Products for the 2009–2010 Influenza Season

Seasonal Influenza Vaccines

Manufacturer	Trade Name	Presentation	Mercury Content (μg Hg/0.5mL dose)	Age Indication
OOL Dietherseier	0.5 mL (single-dose syringe)	0	36 months & older	
CSL Biotrierapies	CSL Biotherapies Afluria	5.0 mL (multi-dose vial)	24.5	6 months & older
GlaxoSmithKline	Fluarix	0.5 mL (single-dose syringe)	0	3 years & older
ID Biomedical Corporation of Quebec (Distributed by GlaxoSmithKline)	FluLaval	5.0 mL (10-dose vial)	25	18 years & older
MedImmune	FluMist	0.2 mL (single-use nasal spray)	0	2 through 49 years
Florida	0.5 mL (single-dose syringe)	<u><</u> 1	Aveore 9 older	
Novartis Vaccines	Fluvirin	5.0 mL (10-dose vial)	25	4 years & older
	Agriflu	0.5 mL (single-dose syringe)	0	18 years & older
sanofi pasteur FluZone	0.25 mL (single-dose syringe)	0	6 through 35 months	
	Flu Zana	0.5 mL (single-dose syringe)	0	36 months & older
	riuzone	0.5 mL (single-dose vial)	0	36 months & older
		5.0 mL (multi-dose vial)	25	6 months & older

Influenza A (H1N1) 2009 Monovalent Vaccines

Manufacturer	Presentation	Mercury Content (µg Hg/0.5 mL dose)	Age Indication
COL Biath annuis	0.5 mL (single-dose syringe)	0	36 months & older
CSL Biotherapies	5.0 mL (multi-dose vial)	24.5	6 months & older
ID Biomedical Corporation of Quebec (Distributed by GlaxoSmithKline)	5.0 mL (10-dose vial)	25	18 years & older
MedImmune	0.2 mL (single-use nasal spray)	0	2 through 49 years
November Vennings	0.5 mL (single-dose syringe)	<u><</u> 1	4 veers & older
Novartis Vaccines	5.0 mL (10-dose vial)	25	4 years & older
	0.25 mL (single-dose syringe)	0	6 through 35 months
sanofi pasteur	0.5 mL (single-dose syringe)	0	36 months & older
	0.5 mL (single-dose vial)	0	36 months & older
	5.0 mL (multi-dose vial)	25	6 months & older

Visit the following sites for more information on influenza vaccines:

- 1. 2009-2010 seasonal influenza vaccine package inserts: www.immunize.org/packageinserts/pi_influenza.asp
- 2. 2009 H1N1 influenza vaccine package inserts: www.immunize.org/packageinserts/pi_h1n1.asp
- 3. Vaccine production, ordering, and distribution: www.preventinfluenza.org/profs_production.asp
- 4. "60 Minutes" broadcast on H1N1 vaccine production: www.cbsnews.com/stories/2009/10/29/60minutes/main5451803.shtml
- 5. Vaccine information for clinicians and healthcare professionals: www.cdc.gov/h1n1flu/vaccination/professional.htm
- 6. H1N1 immunization CPT codes and billing information: www.ama-assn.org/ama/pub/h1n1/vaccination-information/billing.shtml

www.immunize.org/catg.d/p4072.pdf • Item #P4072 (12/09)

Declination of Seasonal Influenza Vaccination

Decimation of ocasonal influenza v	accination
My employer or affiliated health facility,	, has recommended
that I receive influenza vaccination to protect the patients I serve.	
I acknowledge that I am aware of the following facts:	
♦ Influenza is a serious respiratory disease that kills an average of 30 hospitalizes more than 200,000 persons in the United States each	
• Influenza vaccination is recommended for me and all other healthough patients from influenza disease, its complications, and death.	care workers to protect our
• If I contract influenza, I will shed the virus for 24–48 hours before appear. My shedding the virus can spread influenza disease to pati	
• If I become infected with influenza, even when my symptoms are spread severe illness to others.	mild or non-existent, I can
♦ I understand that the strains of virus that cause influenza infection which is why a different influenza vaccine is recommended each y	
◆ I understand that I cannot get influenza from the influenza vaccine	·.
 The consequences of my refusing to be vaccinated could have life to my health and the health of those with whom I have contact, inc. my patients and other patients in this healthcare setting my coworkers 	
• my family	
• my community	
Despite these facts, I am choosing to decline influenza vaccination rig	ght now for the following
I understand that I can change my mind at any time and accept influer is available.	nza vaccination, if vaccine
I have read and fully understand the information on this declination for	orm.

Reference: CDC. Prevention and Control of Seasonal Influenza with Vaccines—Recommendations of ACIP at www.cdc.gov/flu/professionals/acip/index.htm

Technical content reviewed by the Centers for Disease Control and Prevention, December 2009.

www.immunize.org/catg.d/p4068.pdf • Item #P4068 (12/09)

Signature: _____ Date: _____

Name (print):

Department:

Declination of H1N1 Influenza Vaccination

My employer or affiliated health facility, $_$ _______, has recommended that I receive the 2009 H1N1 influenza vaccination to protect the patients I serve.

I acknowledge that I am aware of the following facts:

- Seasonal influenza is a serious respiratory disease that kills an average of 36,000 people and hospitalizes more than 200,000 people in the United States each year.
- A novel 2009 H1N1 influenza virus first appeared in spring 2009, reaching pandemic proportions in just a few months. Infection with H1N1 influenza is expected to result in more illness, hospitalizations, and deaths than infection with seasonal influenza will.
- As a healthcare worker, I am among the groups targeted for initial vaccination with the 2009 H1N1 influenza vaccine because I am likely to have contact with influenza viruses in my work setting. If infected, I could transmit the H1N1 influenza virus to patients and coworkers, resulting in their becoming infected with the virus and developing subsequent complications, including death.
- Vaccination against seasonal influenza viruses will not provide protection against the 2009 H1N1 influenza virus; therefore my vaccination with 2009 H1N1 influenza vaccine is crucial.
- If I contract H1N1 influenza, I will likely shed the virus for 24–48 hours before influenza symptoms appear, during which time I can spread influenza disease to patients in this facility.
- If I become infected with H1N1 influenza, I can spread severe illness to others, even if my symptoms are mild or non-existent.
- I understand that I cannot get influenza from the H1N1 influenza vaccine.
- I understand that the types and frequencies of side effects from the H1N1 vaccine are likely to be similar to those from seasonal influenza vaccine. This may include mild, localized reactions, such as soreness and redness at the site of injection for the injectable (inactivated) vaccine, and runny nose and nasal congestion for the nasal-spray (live) vaccine.
- The consequences of my refusing to be vaccinated could have life-threatening consequences to my health and the health of those with whom I have contact, including
 - my patients and other patients in this healthcare setting
 - my coworkers
 - my family
 - my community

Despite these facts, I am choosing to decline H1N1 influenza vareasons:	
I understand that I can change my mind and accept H1N1 influent. I have read and fully understand the information on this declinate	za vaccination, if vaccine is available.
Signature:	Date:
Name (print):	_
Department:	_
	www.immunize.org/catg.d/p4071.pdf • Item #P4071 (11/09)

Order Essential Immunization Resources from IAC

To order visit www.immunize.org/shop or use order form on the next page

Immunization record cards available for all ages—for children & teens, for adults, and for a lifetime!



Give any patient a permanent vaccination record card designed specifically for their age group: child & teen, adult, or lifetime. The three cards list all vaccines recommended for each age. The cards are printed on durable rip-, smudge-, and water-proof paper. Wallet-sized when folded, the cards are brightly

colored to stand out. To view the cards or for more details, go to **www.immunize.org/shop** and click on the images.

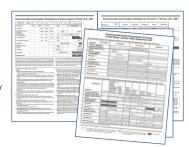
Buy I box (250 cards) for \$37.50 (first order of a 250-card box has a 30-day, money-back guarantee). Discounts for larger orders: 2 boxes \$35 each; 3 boxes \$32.50 each; 4–7 boxes \$30 each; 8–10 boxes \$28.75 each; I I –200 boxes \$27.50 each

To order, visit www.immunize.org/shop, or use order form on page 15.

For sample cards, pricing for 201 or more boxes, or customization, contact us: admininfo@immunize.org

Laminated child and adult immunization schedules—order one of each for every exam room

Here are the ACIP/AAP/ AAFP-approved immunization schedule for people ages 0 through 18 years and the ACIP/AAFP/ ACOG/ACP-approved schedule for adults. Both are laminated for heavy-



duty use, complete with essential footnotes, and printed in color for easy reading. The cost is \$10 each for 1–4 schedules, with discounts for larger orders: \$6.50 each for 5–19 schedules, \$5 each for 20–99 schedules, and \$4 each for 100–499 schedules.

To order, visit www.immunize.org/shop, or use the order form on page 15.

For 500 or more schedules, contact us for discount pricing: admininfo@immunize.org

Immunization screening questionnaires for contraindications! English on front, Spanish on back; in 100-sheet pads



Save valuable staff time and make sure your patients are fully screened by using these simple I-page questionnaires (one for child/teen immunization, another for adults). Patients respond to questions by checking off "yes" and "no" boxes while waiting to be seen. Staff reviews answers during the visit. These pads are priced

at \$16 per 100-sheet pad. Prices drop to \$12 each for 2 pads, \$11 each for 3 pads, \$10 each for 4–9 pads. Keep pads at the receptionist's desk, the nurses' station, and in every exam room. To view the pads or for more details, visit IAC's website at www.immunize.org/shop.

To order, visit www.immunize.org/shop or use order form on page 15.

For 10 or more pads, contact us for discount pricing: admininfo@immunize.org

Immunization Techniques: Safe, Effective, Caring — DVD or VHS video

(created by the State of California, Immunization Program, 2001)



This 35-minute DVD or VHS video presents practical information on administering intramuscular (IM) and subcutaneous (SC) vaccines to people of all ages. Includes discussion of anatomic sites, needle sizes, vaccines and routes of administration, and much more. Excellent for training new staff

and refreshing experienced staff. Comes with presenter notes and a skills checklist. \$10.50 for DVD or VHS video.

To order, visit www.immunize.org/shop, or use the order form on page 15.

Order Essential Immunization Resources from IAC

Immunization record cards for all: for children & teens, for adults, for a lifetime!

Immunization record cards offer healthcare professionals a way to help patients maintain a permanent record of their vaccinations. Patient-held cards are handy for patients when they enter daycare or school, change healthcare providers, or travel abroad.

We offer three record cards: child & teen, adult, and lifetime. Each is designed for a specific age group and lists all vaccines recommended

IAC is a 501(c)(3) charitable organization and your contribution is tax deductible to the fullest extent of the law

Purchases and Contribution Total \$

for people in the age group. Sized to fit in a wallet, each is brightly colored to stand out and is printed on durable rip-, smudge-, and water-proof paper.

To order record cards or any of our other essential immunization resources, print out and mail or fax the form below or place your order online at www.immunize.org/shop.

It's convenient to shop IAC online at www.immunize.org/shop

Order Essential Immunization Resources	How to Place an Order	
CD-ROM of IAC print materials FREE with a contribution of \$75 or more (see below). The CD contains all of IAC's ready-to-print materials in English and any translations available in Spanish. Includes VISs in English and Spanish.	By Credit Card: Order easily online at our secure shopping cart at www.immunize.org/shop.	
Laminated U.S. Immunization Schedules Oty. (details p. 14; call for discounts on bulk orders) R2008 Child/teen schedule: 1-4 copies—\$10 each; 5-19 copies—\$6.50 each\$ R2009 Adult schedule: 1-4 copies—\$10 each; 5-19 copies—\$6.50 each\$ Padded Questionnaires for Vaccine Contraindications English on one side/Spanish on the other (details p. 14; call for discounts on bulk orders) 100 sheets/pad; 1 pad—\$16; 2 pads—\$12 each; 3 pads—\$11 each; 4 pads—\$10 each R4060 Child/teen screening questionnaire in English/Spanish\$ R4065 Adult screening questionnaire in English/Spanish\$ Patient Immunization Record Cards — (wallet-sized) (details p. 14; call for discounts on bulk orders)	By Check, Purchase Order, or Credit Card: Print out this page, fill out the necessary information, and Fax the page to: (651) 647-9131 or Mail the page to: Immunization Action Coalition 1573 Selby Avenue, Suite 234 St. Paul, MN 55104 Our federal ID# is 41-1768237.	
250 cards/box; 1 box=\$37.50; 2 boxes=\$35 each; 3 boxes=\$32.50 each; 4 boxes=\$30 each R2003 Child/teen immunization record cards	Method of payment: ☐ Check enclosed (payable to Immunization Action Coalition) ☐ Purchase order #	
DVD and Videotape (call for discounts on bulk orders) D2020 DVD: Immunization Techniques: Safe, Effective, Caring\$10.50 V2020 Videotape: Immunization Techniques: Safe, Effective, Caring \$10.50	☐ Visa ☐ Mastercard ☐ Am. Express ☐ Discover	
Subtotal for Purchases \$		
Make a Charitable Contribution I am a □ new □ renewing contributor. Here is my contribution:	Expiration Date mo/yr CV Code #* *The CV Code is the Credit Verification Code, the additional 3- or 4-digit number on your credit card.	
□ \$25 □ \$50 □ \$75 □ \$100 □ \$125 □ \$150 □ \$200 □ \$250 other: \$ □ As a thank-you gift, I'd like a packet of some of IAC's most popular print pieces.	Name/Title Organization	
I'm contributing \$75 or more and would like the additional thank-you gift of a CD containing all of IAC's English- and Spanish-language print materials, plus Vaccine Information Statements in English and Spanish.	Shipping address (Check one: This is my □ organization address □ home address) City/State/Zip	

It's convenient to shop IAC online at www.immunize.org/shop

Telephone

Email address

vaccines are exactly the same as seasonal influenza vaccines except for the strain of influenza virus they contain. One way to approach this discussion is to emphasize that the 2009 H1N1 vaccine is not a "new" vaccine but rather is a change in the strains (just as there is a change in the strains used to prepare a new vaccine for each influenza season). Each year, experts look at the strains that are likely to be circulating during the next influenza season and put those into the upcoming year's influenza vaccine. That's exactly what has been done in preparing the H1N1 vaccine.

Most of the seasonal influenza vaccines distributed over the last decade have included H1N1-like strains. If the timing had been better, it is possible that the 2009 H1N1 strain could have been included in the 2009-10 seasonal influenza vaccine.

Do any of the H1N1 influenza vaccines include an adjuvant?

None of the currently approved H1N1 influenza vaccines or seasonal influenza vaccines contains an adjuvant. (NOTE: An adjuvant is a substance that is sometimes added to a vaccine to enhance the immune response, so that smaller quantities of vaccine can be given.) Most childhood vaccines contain an adjuvant.

Do the H1N1 influenza vaccines use thimerosal as a preservative?

All multidose vials of influenza vaccine (both seasonal and H1N1) contain thimerosal as a preservative. There is no evidence that thimerosal is harmful. CDC recommends that pregnant women and children may receive influenza vaccine with or without thimerosal. However, because some pregnant women and parents are concerned about exposure to thimerosal, manufacturers are producing some preservative-free seasonal and H1N1 influenza vaccines in single-dose syringes.

The live intranasal H1N1 influenza vaccine is packaged in single doses so it does not use a preservative; however, it cannot be used for pregnant women or children younger than age 2 years.

Can the H1N1 influenza vaccine be given to someone who had an influenza-like illness between April and now?

If an influenza-like illness (ILI) was confirmed as H1N1 by reverse transcriptase polymerase chain reaction (RT-PCR), then vaccination with H1N1 monovalent vaccine is not necessary for the 2009-10 season. If the ILI was not confirmed by RT-PCR, then the person should be vaccinated if indicated. There is no harm in vaccinating a person who had H1N1 influenza in the past.

Can we test patients who think they already had H1N1 influenza to see if their infection was caused by H1N1?

There is no test readily available that can show whether a person had 2009 H1N1 influenza in the past. People for whom the 2009 H1N1 influenza vaccine is recommended should receive it, unless they can be certain they had 2009 H1N1 influenza

To receive "Ask the Experts" by email, subscribe to the Immunization Action Coalition's news service, IAC Express. Special "Ask the Experts" issues are published five times per year. Subscribe at

www.immunize.org/subscribe

To find more than a thousand "Ask the Experts" questions, go to www.immunize.org/askexperts

based on a reverse transcriptase polymerase chain reaction (RT-PCR) test.

Can patients on influenza antiviral prophylaxis (e.g., Tamiflu) receive seasonal and/or H1N1 influenza vaccine?

Such patients can receive inactivated seasonal or inactivated H1N1 influenza vaccine. A person taking an influenza antiviral drug (including Tamiflu or Relenza) should not be given the nasal-spray influenza vaccine until 48 hours after the last dose of the influenza antiviral medication was given. If LAIV is administered less than 48 hours after a dose of antiviral medication, or if antivirals are administered less than 2 weeks after LAIV is administered, then the LAIV dose should not be counted as valid.

Why is there an increased emphasis on giving pneumococcal polysaccharide vaccine (PPSV) this influenza season?

The reason is that CDC is receiving reports of greater-than-expected numbers of cases of invasive pneumococcal disease concurrent with increases in influenza-associated hospitalizations. Healthcare providers should give PPSV to all people for whom it is recommended. This includes previously unvaccinated adults age 65 years and older and people ages 2-64 years with certain high-risk medical conditions. For an explanation about the importance of using pneumococcal vaccine during influenza season, read CDC's Health Advisory titled "Pneumococcal Vaccination Recommended to Help Prevent Secondary Infections" at www2a.cdc.gov/HAN/ArchiveSys/ViewMsgV. asp?AlertNum=00301.

What personal protective equipment is recommended for healthcare workers who are administering LAIV vaccines?

Personal protective equipment (gloves and masks) are not needed when administering LAIV vaccines for seasonal or 2009 H1N1 influenza virus.

Do providers working at a large-scale influenza vaccination event have to wash their hands between each patient?

Yes. Hands should be washed thoroughly with soap and water or cleansed with an alcohol-based waterless antiseptic between patients. The Department of Health and Human Services has provided the following guidance in its Pandemic Influenza Plan:

*If hands are visibly soiled or contaminated with

respiratory secretions, wash hands with soap (either non-antimicrobial or antimicrobial) and water.

*In the absence of visible soiling of hands, approved alcohol-based products for hand disinfection are preferred over antimicrobial soap and water or plain soap and water because of their superior microbiocidal activity, reduced drying of the skin, and convenience.

For more information, go to: www.cdc.gov/handhygiene.

Though I know it is not necessary to wear gloves when providing injections, if a nurse chooses to wear gloves, should the nurse change gloves after administering each vaccination during a busy flu clinic?

Yes. Persons who administer vaccines should either wash their hands with soap and water, use alcohol-based hand sanitizer, or change their gloves between individual patient encounters.

Where can I find VISs for seasonal and H1N1 influenza vaccines?

IAC posts the English-language VISs developed by CDC and all available translations on its website as soon as they become available. There are more than 40 translations of certain VISs. Please note that all VIS translations are graciously donated. To access all VISs and their translations, go to www. immunize.org/vis.

NOTE: To submit a question to Ask the Experts, email your question to admin@immunize.org. Most questions featured in Ask the Experts are a composite of several inquiries—we cannot guarantee that we will print your specific question. Also, we may have already answered your question. To see if we have, check our Ask the Experts archive of more than a thousand questions at www.immunize. org/askexperts.

Needle Tips correction policy

The Immunization Action Coalition works tirelessly to ensure the accuracy of the information we make available. At times, however, mistakes occur. 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.