



Take a **STAND!**TM

Use Standing Orders to Vaccinate Adults

Session 2

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Session 2

Standing Orders Protocols: How They Work

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Immunization Action Coalition
Chief Strategy Officer



Standing Orders Protocols: How They Work

In this session we will discuss:

- What are standing orders?
- What are the components of a standing orders protocol?
- Do standing orders improve vaccination rates?
- How do standing orders benefit medical practices?

The Problem

- Adult immunization rates are appallingly low.
- Patients aren't receiving their recommended vaccinations during office visits.
- Clinicians must address acute and chronic medical issues first; results in lack time for vaccinations and other preventive health issues.
- Missed opportunities abound.
- Patients are not protected from vaccine-preventable diseases.

Standing Orders – A Solution

The goal of using standing orders is to increase vaccination coverage by:

- Reducing missed opportunities in your practice
- Routinizing vaccination by making it a program rather than relying on an individual clinician's order for each dose of vaccine
- Empowering nurses (or other legally qualified individuals) to manage your vaccination program
- Freeing up clinician time

What are standing orders?

Standing Orders – What Are They?

Written protocols, approved by a physician or other authorized practitioner, that authorize nurses, pharmacists, or other health care personnel (where allowed by state law,) to:

- Assess a patient's need for vaccination
- Administer the vaccine without a clinician's direct involvement with the individual patient at the time of the interaction

Who Recommends Use of Standing Orders?

- The *Community Preventive Services Task Force* recommends standing orders to increase vaccination coverage among adults and children on the basis of strong evidence of effectiveness.
 - Applicable to patients in both inpatient and outpatient settings where improvements in coverage are needed.
- The *Advisory Committee on Immunization Practices* (ACIP) recommends standing orders for influenza and pneumococcal vaccinations and several other adult vaccines.

Use of Standing Orders

- In 2009, only 42% of physicians reported using standing orders for adult influenza vaccination
- Only 23% reported consistently using standing orders for both influenza vaccine and pneumococcal polysaccharide vaccine

Zimmerman et al. *Am J Prev Med* 2011; 40(2):144-8

Use of Standing Orders

The most important factors associated with greater likelihood of a practice consistently using standing orders are:

- being aware of the ACIP recommendations or Medicare regulations regarding adult immunizations
- agreeing that Standing Orders are effective
- having two or more clinical staff per physician

Zimmerman et al. *Am J Prev Med* 2011; 40(2):144-8



March 24, 2000 / Vol. 49 / No. RR-1



*Recommendations
and
Reports*

Adult Immunization Programs in Nontraditional Settings: Quality Standards and Guidance for Program Evaluation

**A Report of the National Vaccine
Advisory Committee**

and

Use of Standing Orders Programs to Increase Adult Vaccination Rates

**Recommendations of the Advisory
Committee on Immunization Practices**

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Disease Control and Prevention (CDC)
Atlanta, GA 30333





DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

7500 Security Boulevard
Baltimore, MD 21244-1850

Ref: S&C-03-02

DATE: October 10, 2002

FROM: Director
Survey and Certification Group
Center for Medicaid and State Operations

SUBJECT: Change in requirement for signed physician's order for influenza and pneumonia vaccine

TO: Associate Regional Administrator, DMSO
State Survey Agency Directors

The purpose of this program memorandum is to provide information and guidance to regional offices, and state survey agency personnel regarding a new regulation that will remove the federal barrier requiring nursing home providers, home health agencies and hospitals to have individually signed physician's order for influenza and pneumococcal vaccines.

The Survey Procedures and Interpretive Guidelines for Long Term Care Facilities, Home Health Agencies and Hospitals require physicians to sign and date all orders. The new regulation allows nursing home providers, home health agencies and hospitals to adopt strategies to increase influenza and pneumonia vaccination rates such as institution or physician-approved protocols i.e., standing orders, that do not require individually signed physician orders. Accordingly, surveyors should not be citing providers that have adopted standing orders for influenza and pneumococcal vaccinations for the failure to have individually signed physician orders.

Use of Standing Orders

Other important factors:

- being a family physician
- having an office staff that works well together and is open to innovation
- having an electronic medical record (EMR)
- having an immunization champion in the practice

Zimmerman et al. *Am J Prev Med* 2011; 40(2):144-8

Use of Standing Orders

Lack of standing orders implementation may be due to:

- weak or no organizational support
- small size of the clinical support staff relative to providers
- concerns about legal ramifications of SOs

Zimmerman et al. *Am J Prev Med* 2011; 40(2):144-8

Barriers to the Use of Standing Orders

Table 2. Among Physicians with Differing Use of Standing Orders Programs (SOPs), Percent Reporting Various “Major Barriers” to Initiating or Maintaining SOPs for Adult Vaccinations ^a

Barrier	Percent Who Report Major Barrier to SOPs for Influenza Vaccine			
	Category of SOP user			
	None, no Plans to Implement <i>n</i> = 273	None, Would Like to Implement <i>n</i> = 142	Uses Inconsistently <i>n</i> = 87	Uses Consistently <i>n</i> = 378
Insufficient care staff	22.6	22.6	12.2	4.8**
Inadequate training of staff	14.0	5.3	3.7	2.1**
Staff communication	6.7	5.3	11.0	3.3**
Lack of reliable tracking system	15.4	19.5	15.7	4.5**
Work flow pattern	21.9	20.0	12.2	5.4**
Resources to change policy	26.0	26.5	15.9	6.0**
Patient preference for physician management of care	15.1	8.9	4.9	2.4**
Physician preference for management of care	25.7	5.2	4.9	2.4**
Fear of malpractice	17.1	5.3	2.5	2.4**
Frequently changing recommendations	8.7	10.5	4.9	2.7**
Physicians do not support vaccination as a preventive measure	2.1	1.5	0.0	0.9 [†]

^aComparisons are for each vaccine across all physician groups; values represent column percents.

***p* < .001 by χ^2 .

[†]Not significant.

Yonas et al. *J Healthcare Quality* 2012;34:34-42

Vaccine Injury Compensation Program

- Established by National Childhood Vaccine Injury Act (1986)
- Provides no-fault compensation for specified injuries that are temporally related to specified vaccinations
- Program has greatly reduced the risk of litigation for both providers and vaccine manufacturers
- Covers all routinely recommended childhood vaccines, including those administered to adults

www.hrsa.gov/vaccinecompensation/index.html



What are the components of a standing orders protocol?

STANDING ORDERS FOR Administering Influenza Vaccine to Adults

Purpose

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

Policy

Where allowed by state law, standing orders enable eligible nurses and other health care professionals (e.g., pharmacists) to assess the need for vaccination and to vaccinate adults who meet any of the criteria below.

Procedure

1 Assess Adults for Need of Vaccination against influenza

- All adults are recommended to receive influenza vaccination each year.
- People who do not recall whether they received influenza vaccine this year should be vaccinated.

2 Screen for Contraindications and Precautions

Contraindications for use of all influenza vaccines

Do not give influenza vaccine to a person who has experienced a serious systemic or anaphylactic reaction to a prior dose of the vaccine or to any of its components. For a list of vaccine components, refer to the manufacturer's package insert (www.immunize.org/packageinserts) or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.

Contraindications only for use of live attenuated influenza vaccine (LAIV; FluMist, nasal spray)

Do not give live attenuated influenza vaccine (LAIV; nasal spray) to a person who:

- has a history of either an anaphylactic or non-anaphylactic allergy to eggs
- is pregnant
- has immunosuppression (including that caused by medications or HIV)
- is age 50 years or older
- received influenza antivirals (e.g., amantadine, rimantadine, zanamivir, or oseltamivir) within the previous 48 hours or will possibly receive them within 14 days after vaccination
- provides care for a severely immunosuppressed person who requires a protective environment

Precautions for use of all influenza vaccines

- Moderate or severe acute illness with or without fever
- History of Guillain Barré syndrome within 6 weeks of a previous influenza vaccination

Precautions for use of LAIV only

- Asthma
- Other chronic medical conditions (e.g., other chronic lung diseases, chronic cardiovascular disease [excluding isolated hypertension], diabetes, chronic renal or hepatic disease, hematologic disease, neurologic disease, and metabolic disorders)

NOTE REGARDING PATIENTS WITH HIVES AFTER EATING EGGS: An egg-free recombinant hemagglutinin influenza vaccine (RIV3) may be used for people age 18 years and older with egg allergy of any severity. For people who experience onset of hives only (and not a more serious reaction) after ingesting eggs, health care providers should administer inactivated influenza vaccine (IIV) and observe the patient for at least 30 minutes after receipt of the vaccine for signs of a reaction.

3 Provide Vaccine Information Statements

Provide all patients with a copy of the most current federal Vaccine Information Statement (VIS). Provide non-English speaking patients with a copy of the VIS in their native language, if one is available and desired; these can be found at www.immunize.org/vis. (For information about how to document that the VIS was given, see section 6 titled "Document Vaccination.")

ularly, choose the needle gauge, needle length, and injection site

AGE	NEEDLE LENGTH	INJECTION SITE
	5/8"-1"	Deltoid muscle of arm
	1"	Deltoid muscle of arm
	1-1 1/2"	Deltoid muscle of arm
	1-1 1/2"	Deltoid muscle of arm
	1 1/2"	Deltoid muscle of arm
	1 1/2"	Deltoid muscle of arm

30 lbs (<60 kg) for IM injection in the deltoid muscle only if the scheduled, and the injection is made at a 90-degree angle to the skin.

ly or intradermally, prepare the vaccine according to directions in

to the criteria and guidance in the table below:

ROUTE	INSTRUCTIONS
Intramuscular (IM)	Administer vaccine in deltoid muscle.
Intradermal (ID)	Insert needle of the microinjection system at a 90 degree angle in the deltoid area.
Intramuscular (IM)	Administer vaccine in deltoid muscle.
Intramuscular (IM)	Administer vaccine in deltoid muscle.
(0.1 mL each nostril) Intranasal spray (NAS)	Spray half of vaccine into each nostril while the patient is in an upright position.

vaccine, see "How to Administer Intramuscular," immunize.org/catg.d/p2024.pdf.

n information and follow up in the following places:

was administered, the manufacturer and lot number, the vaccina- person administering the vaccine. You must also document, in the ation date of the VIS and the date it was given to the patient. If n(s) for non-receipt of the vaccine (e.g., medical contraindication,

ate of vaccination and the name/location of the administering clinic.

stry": Report the vaccination to the appropriate state/local IIS,

ed to the administration of vaccine by having a written t and medications. For IAC's "Medical Management of g.d/p3082.pdf. To prevent syncope, vaccinate patients them for 15 minutes after receipt of the vaccine.

fluenza vaccine to the federal Vaccine Adverse Event e available on the website or by calling (800) 822-7967.

s of the _____
NAME OF PRACTICE OR CLINIC

Signature date _____ Effective date _____

Components of a Standing Orders Protocol

A comprehensive standing order should include these elements:

- Who is targeted to receive the vaccine
- How to determine if a patient needs or should receive a particular vaccination (e.g., indications, contraindications, and precautions)
- Provision of any federally required information (e.g., Vaccine Information Statement)
- Procedures for preparing and administering the vaccine (e.g., vaccine name, schedule for vaccination, appropriate needle size, vaccine dosage, route of administration)

Components of a Standing Orders Protocol

(cont.)

A comprehensive standing order should include these elements:

- How to document vaccination in the patient record
- A protocol for the management of any medical emergency related to the administration of the vaccine
- How to report possible adverse events occurring after vaccination
- Authorization by a physician or other authorized practitioner

Components of a Standing Orders Protocol (1)

Who is targeted to receive the vaccine –
assessing the need

Procedure

1 **Assess Adults for Need of Vaccination** against influenza

- All adults are recommended to receive influenza vaccination each year.
- People who do not recall whether they received influenza vaccine this year should be vaccinated.

Components of a Standing Orders Protocol (2)

How to determine if the patient can receive a particular vaccination (e.g., screen for contraindications and precautions)

2 Screen for Contraindications and Precautions

Contraindications for use of all influenza vaccines

Do not give influenza vaccine to a person who has experienced a serious systemic or anaphylactic reaction to a prior dose of the vaccine or to any of its components. For a list of vaccine components, refer to the manufacturer's package insert (www.immunize.org/packageinserts) or go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.

Contraindications only for use of live attenuated influenza vaccine (LAIV; FluMist, nasal spray)

Do not give live attenuated influenza vaccine (LAIV; nasal spray) to a person who:

- has a history of either an anaphylactic or non-anaphylactic allergy to eggs
- is pregnant
- has immunosuppression (including that caused by medications or HIV)
- is age 50 years or older
- received influenza antivirals (e.g., amantadine, rimantadine, zanamivir, or oseltamivir) within the previous 48 hours or will possibly receive them within 14 days after vaccination
- provides care for a severely immunosuppressed person who requires a protective environment

Precautions for use of all influenza vaccines

- Moderate or severe acute illness with or without fever

Screening Checklist for Contraindications

to Live Attenuated Intranasal Influenza Vaccination

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

1. Is the person to be vaccinated sick today?
2. Does the person to be vaccinated have an allergy to eggs or to a component of the influenza vaccine?
3. Has the person to be vaccinated ever had a serious reaction to influenza vaccine in the past?
4. Is the person to be vaccinated younger than age 2 years or older than age 49 years?
5. Does the person to be vaccinated have a long-term health problem with heart disease, lung disease (including asthma), kidney disease, neurologic disease, liver disease, disease (e.g., diabetes), or anemia or another blood disorder?
6. If the person to be vaccinated is a child age 2 through 4 years, in the past 12 months, has a health care provider told you the child had wheezing or asthma?
7. Does the person to be vaccinated have cancer, leukemia, HIV/AIDS, or any other immune system problem; or, in the past 3 months, have they taken medications that affect the immune system, such as prednisone, other steroids, drugs for the treatment of rheumatoid arthritis, Crohn's disease, or psoriasis or anticancer drugs; or have they had radiation treatments?
8. Is the person to be vaccinated receiving influenza antiviral medications?
9. Is the person to be vaccinated a child or teen age 2 through 17 years and receiving aspirin therapy or aspirin-containing therapy?
10. Is the person to be vaccinated pregnant or could she become pregnant within the next month?
11. Has the person to be vaccinated ever had Guillain-Barré syndrome?
12. Does the person to be vaccinated live with or expect to have close contact with a person whose immune system is severely compromised and who must be in protective isolation (e.g., an isolation room of a bone marrow transplant unit)?
13. Has the person to be vaccinated received any other vaccinations in the past 4 weeks?

FORM COMPLETED BY _____

FORM REVIEWED BY _____



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

Technical content reviewed by the Centers for Disease Control and Prevention
www.immunize.org/catg.d/p4066.pdf

Screening Checklist for Contraindications to Inactivated Injectable Influenza Vaccination

PATIENT NAME _____

DATE OF BIRTH _____ / _____ / _____
month day year

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

- | | yes | no | don't know |
|--|--------------------------|--------------------------|--------------------------|
| 1. Is the person to be vaccinated sick today? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Does the person to be vaccinated have an allergy to eggs or to a component of the vaccine? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Has the person to be vaccinated ever had a serious reaction to influenza vaccine in the past? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Has the person to be vaccinated ever had Guillain-Barré syndrome? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

FORM COMPLETED BY _____ DATE _____

FORM REVIEWED BY _____ DATE _____



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

Technical content reviewed by the Centers for Disease Control and Prevention
www.immunize.org/catg.d/p4066.pdf • Item #P4066 (8/15)



Components of a Standing Orders Protocol (3)

Provision of federally required information:
the Vaccine Information Statement

3 Provide Vaccine Information Statements

Provide all patients with a copy of the most current federal Vaccine Information Statement (VIS). Provide non-English speaking patients with a copy of the VIS in their native language, if one is available and desired; these can be found at www.immunize.org/vis. (For information about how to document that the VIS was given, see section 6 titled “Document Vaccination.”)

VACCINE INFORMATION STATEMENT

Influenza (Flu) Vaccine (Inactivated or Recombinant): What you need to know

1 Why get vaccinated?

Influenza ("flu") is a contagious disease that spreads around the United States every year, usually between October and May.

Flu is caused by influenza viruses, and is spread mainly by coughing, sneezing, and close contact.

Anyone can get flu. Flu strikes suddenly and can last several days. Symptoms vary by age, but can include:

- fever/chills
- sore throat
- muscle aches
- fatigue
- cough
- headache
- runny or stuffy nose

Flu can also lead to pneumonia and blood infections, and cause diarrhea and seizures in children. If you have a medical condition, such as heart or lung disease, flu can make it worse.

Flu is more dangerous for some people. Infants and young children, people 65 years of age and older, pregnant women, and people with certain health conditions or a weakened immune system are at greatest risk.

Each year **thousands of people in the United States die from flu**, and many more are hospitalized.

Flu vaccine can:

- keep you from getting flu,
- make flu less severe if you do get it, and
- keep you from spreading flu to your family and other people.

2 Inactivated and recombinant flu vaccines

A dose of flu vaccine is recommended every flu season. Children 6 months through 8 years of age may need two doses during the same flu season. Everyone else needs only one dose each flu season.

Some inactivated flu vaccines contain a very small amount of a mercury-based preservative called thimerosal. Studies have not shown thimerosal in vaccines to be harmful, but flu vaccines that do not contain thimerosal are available.

There is no live flu virus in the flu.

There are many flu viruses changing. Each year a new vaccine is made against three or four viruses expected in the upcoming flu season. The vaccine doesn't exactly match the viruses, but it provides some protection.

Flu vaccine cannot prevent:

- flu that is caused by a virus not covered by the vaccine, or
- illnesses that look like flu but are not.

It takes about 2 weeks for protection to develop after vaccination, and protection lasts through the flu season.

3 Some people should not get this vaccine

Tell the person who is giving you the vaccine:

- **If you have any severe, life-threatening allergic reaction to any part of this vaccine, or get vaccinated.** Most, but not all, contain a small amount of egg protein.
- **If you ever had Guillain-Barré Syndrome (GBS).** Some people with a history of GBS should not get this vaccine. This should be discussed with your doctor.
- **If you are not feeling well.** It is usually okay to get a flu vaccine if you have a mild illness, but you should wait until you feel better.



VACCINE INFORMATION STATEMENT

Influenza (Flu) Vaccine (Live, Intranasal): What You Need to Know

Many Vaccine Information Statements are available in Spanish and other languages. See www.imz.org/vi.
Reglas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.imz.org/vi.

1 Why get vaccinated?

Influenza ("flu") is a contagious disease that spreads around the United States every year, usually between October and May.

Flu is caused by influenza viruses, and is spread mainly by coughing, sneezing, and close contact.

Anyone can get flu. Flu strikes suddenly and can last several days. Symptoms vary by age, but can include:

- fever/chills
- sore throat
- muscle aches
- fatigue
- cough
- headache
- runny or stuffy nose

Flu can also lead to pneumonia and blood infections, and cause diarrhea and seizures in children. If you have a medical condition, such as heart or lung disease, flu can make it worse.

Flu is more dangerous for some people. Infants and young children, people 65 years of age and older, pregnant women, and people with certain health conditions or a weakened immune system are at greatest risk.

Each year **thousands of people in the United States die from flu**, and many more are hospitalized.

Flu vaccine can:

- keep you from getting flu,
- make flu less severe if you do get it, and
- keep you from spreading flu to your family and other people.

2 Live, attenuated flu vaccine—LAIV, Nasal Spray

A dose of flu vaccine is recommended every flu season. Children younger than 9 years of age may need two doses during the same flu season. Everyone else needs only one dose each flu season.

The **live, attenuated influenza vaccine** (called LAIV) may be given to healthy, non-pregnant people **2 through 49 years of age**. It may safely be given at the same time as other vaccines.

LAIV is sprayed into the nose. LAIV does not contain thimerosal or other preservatives. It is made from weakened flu virus and **does not cause flu**.

There are many flu viruses, and they are always changing. Each year LAIV is made to protect against four viruses that are likely to cause disease in the upcoming flu season. But even when the vaccine doesn't exactly match these viruses, it may still provide some protection.

Flu vaccine cannot prevent:

- flu that is caused by a virus not covered by the vaccine, or
- illnesses that look like flu but are not.

It takes about 2 weeks for protection to develop after vaccination, and protection lasts through the flu season.

3 Some people should not get this vaccine

Some people should not get LAIV because of age, health conditions, or other reasons. Most of these people should get an injected flu vaccine instead. Your healthcare provider can help you decide.

Tell the provider if you or the person being vaccinated:

- have any allergies, including an allergy to eggs, or have ever had an allergic reaction to an influenza vaccine.
- have ever had Guillain-Barré Syndrome (also called GBS).
- have any long-term heart, breathing, kidney, liver, or nervous system problems.
- have asthma or breathing problems, or are a child who has had wheezing episodes.
- are pregnant.
- are a child or adolescent who is receiving aspirin or aspirin-containing products.
- have a weakened immune system.
- will be visiting or taking care of someone, within the next 7 days, who requires a protected environment (for example, following a bone marrow transplant).



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

Components of a Standing Orders Protocol (4)

Prepare to administer the vaccine (e.g., by choosing appropriate vaccine product, needle size, and route of administration)

4 Prepare to Administer Vaccine

For vaccine that is to be administered intramuscularly, choose the needle gauge, needle length, and injection site according to the following chart:

GENDER AND WEIGHT OF PATIENT	NEEDLE GAUGE	NEEDLE LENGTH	INJECTION SITE
Female or male less than 130 lbs	22–25	5/8*–1"	Deltoid muscle of arm
Female or male 130–152 lbs	22–25	1"	Deltoid muscle of arm
Female 153–200 lbs	22–25	1–1½"	Deltoid muscle of arm
Male 153–260 lbs	22–25	1–1½"	Deltoid muscle of arm
Female 200+ lbs	22–25	1½"	Deltoid muscle of arm
Male 260+ lbs	22–25	1½"	Deltoid muscle of arm

* A 5/8" needle may be used in patients weighing less than 130 lbs (<60 kg) for IM injection in the deltoid muscle only if the skin is stretched tight, the subcutaneous tissue is not bunched, and the injection is made at a 90-degree angle to the skin.

For vaccine that is to be administered intranasally or intradermally, prepare the vaccine according to directions in the package insert.

Components of a Standing Orders Protocol (5)

Specific guidance for administration of the vaccine (e.g., right patient, right vaccine, right age group, right dose, right route, and right site)

5 Administer Influenza Vaccine according to the criteria and guidance in the table below:

TYPE OF VACCINE	AGE GROUP	DOSE	ROUTE	INSTRUCTIONS†
Inactivated influenza vaccine (IIV)	All ages	0.5 mL	Intramuscular (IM)	Administer vaccine in deltoid muscle.
IIV-intradermal	18 through 64 years	0.1 mL	Intradermal (ID)	Insert needle of the microinjection system at a 90 degree angle in the deltoid area.
IIV-high dose	65 years and older	0.5 mL	Intramuscular (IM)	Administer vaccine in deltoid muscle.
Recombinant influenza vaccine (RIV3)	18 years and older	0.5 mL	Intramuscular (IM)	Administer vaccine in deltoid muscle.
Intranasal influenza vaccine (LAIV)	Healthy, younger than age 50 years	0.2 mL (0.1 mL into each nostril)	Intranasal spray (NAS)	Spray half of vaccine into each nostril while the patient is in an upright position.

† For complete instructions on how to administer influenza vaccine, see “How to Administer Intramuscular, Intradermal, and Intranasal Influenza Vaccines” at www.immunize.org/catg.d/p2024.pdf.

Components of a Standing Orders Protocol (6)

How to document vaccination in the patient record

6 Document Vaccination

Document each patient's vaccine administration information and follow up in the following places:

Medical record: Document 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. You must also 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. If vaccine was not administered, record the reason(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal).

Personal immunization record card: Record the date of vaccination and the name/location of the administering clinic.

Immunization Information System (IIS) or "registry": Report the vaccination to the appropriate state/local IIS, if available.

ADULT IMMUNIZATION RECORD

Always carry this record with you and have your healthcare professional or clinic keep it up to date.

Last name

First name

M.I.

Birthdate:

(mo.)

(day)

(yr.)

Patient Number:

Immunization Action Coalition • Saint Paul, Minn. • www.immunize.org
To order additional record cards, visit www.immunize.org/shop

Vaccine	Type of vaccine	Date given mo/day/yr	Healthcare professional or clinic name	Date next dose due
Hepatitis B (HepB, HepA-HepB)				
Hepatitis A (HepA, HepA-HepB)				
If combo				
Measles, Mumps, Rubella (MMR)				
Varicella (chickenpox) (Var)				
Zoster (shingles)				
Tetanus, Diphtheria, Pertussis (whooping cough) (Tdap, Td)				

Last name

First name

M.I.

Medical notes (e.g., allergies, vaccine reactions):

Healthcare provider: List the mo/day/yr for each vaccination given. Record the generic abbreviation (e.g., PPSV23) or the trade name. For combination vaccines (e.g., HepA-HepB), fill in a row for each separate antigen in the combination.

Item #R3205 (12/14)

Vaccine	Type of vaccine	Date given mo/day/yr	Healthcare professional or clinic name	Date next dose due
Pneumococcal (PPSV23, PCV13)				
Influenza (IIV, LAIV)				
Human Papillomavirus (HPV2, HPV4, HPV9)				
Meningococcal (MenACWY; MenB, MPSV4)				
Other				

To learn more about vaccines, visit www.vaccineinformation.org

Components of a Standing Orders Protocol (7)

A protocol for the management of any medical emergency related to the administration of the vaccine

7 Be Prepared to Manage Medical Emergencies

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. For IAC's "Medical Management of Vaccine Reactions in Adults," go to www.immunize.org/catg.d/p3082.pdf. To prevent syncope, vaccinate patients while they are seated or lying down and consider observing them for 15 minutes after receipt of the vaccine.

Medical Management of Vaccine Reactions in Adult Patients

All vaccines have the potential to cause an adverse reaction. In order to minimize adverse reactions, patients should be carefully screened for precautionary conditions before a vaccine is administered. Even with careful screening, reactions may occur. These reactions can vary in severity (e.g., soreness, itching) to severe (e.g., anaphylaxis). If reactions occur, the following describes procedures for their management. This document describes procedures to follow in the event of a vaccine reaction.

REACTION	SYMPTOMS	MANAGEMENT
Localized	Soreness, redness, itching, or swelling at the injection site	Apply a cold compress. Consider giving an antipruritic (anti-itch).
	Slight bleeding	Apply an adhesive compress.
	Continuous bleeding	Place thick layer of gauze over the injection site (e.g., patient's heart).
Psychological fright and syncope (fainting)	Fright before injection is given	Have patient sit or lie down.
	Extreme paleness, sweating, coldness of the hands and feet, nausea, lightheadedness, dizziness, weakness, or visual disturbances	Have patient lie flat on back for several minutes. Loosen clothing and maintain an open airway to patient's face.
	Fall, without loss of consciousness	Examine the patient to determine if there is any injury. Place patient flat on back.
	Loss of consciousness	Check the patient to determine if there is any injury. Place patient flat on back with head slightly elevated. If patient does not recover, call 911.
Anaphylaxis	Sudden or gradual onset of generalized itching, erythema (redness), or urticaria (hives); angioedema (swelling of the lips, face, or throat); severe bronchospasm (wheezing); shortness of breath; shock; abdominal cramping; or cardiovascular collapse.	See "Emergency Medical Management of Anaphylactic Reactions" on next page for detailed management of anaphylaxis.



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Medical Management of Vaccine Reactions in Adults (continued)

page 2 of 2

Needed medications for a community immunization clinic

FIRST-LINE medication

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

Optional medication: H₁ antihistamines

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

Needed supplies for a community immunization clinic

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

REFERENCES

- Simons FE, Camargo CA. Anaphylaxis: Rapid recognition and treatment. In: UpToDate, Bochner BS (Ed). UpToDate: Waltham, MA, 2013.
- Boyce JA, Assa'ad A, Burks AW, et al. Guidelines for the Diagnosis and Management of Food Allergy in the United States: Report of the NIAID-Sponsored Expert Panel. *Allergy Clin Immunol* 2010; 126(6): S1-S57.



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Emergency medical protocol for management of anaphylactic reactions in adults

- If itching and swelling are confined to the injection site where the vaccination was given, observe patient closely for the development of generalized symptoms.
- If symptoms are generalized, activate the emergency medical system (EMS; e.g., call 911) and notify the patient's physician. This should be done by a second person, while the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient.
- DRUG DOSING INFORMATION: The first-line and most important therapy in anaphylaxis is epinephrine. There are NO contraindications to epinephrine in the setting of anaphylaxis.**
 - First-line treatment:** Administer aqueous epinephrine 1:1000 dilution intramuscularly, 0.01 mL/kg/dose (adult dose ranges from 0.3 mL to 0.5 mL, with maximum single dose of 0.5 mL).
 - Optional treatment:** H₁ antihistamines for hives or itching; you may also administer diphenhydramine (either orally or by intramuscular injection; the standard dose is 1–2 mg/kg every 4–6 hrs, up to 50 mg maximum single dose) or hydroxyzine (standard oral dose is 0.5–1 mg/kg every 4–6 hrs up to 100 mg maximum single dose).
- Monitor the patient closely until EMS arrives. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain airway. Keep patient in supine position (flat on back) unless he or she is having breathing difficulty. If breathing is difficult, patient's head may be elevated, provided blood pressure is adequate to prevent loss of consciousness. If blood pressure is low, elevate legs. Monitor blood pressure and pulse every 5 minutes.
- If EMS has not arrived and symptoms are still present, repeat dose of epinephrine every 5–15 minutes for up to 3 doses, depending on patient's response.
- Record all vital signs, medications administered to the patient, including the time, dosage, response, and the name of the medical personnel who administered the medication, and other relevant clinical information.
- Notify the patient's primary care physician.

These standing orders for the medical management of vaccine reactions in adult patients shall remain in effect for patients of the

NAME OF CLINIC _____ until rescinded or until _____ DATE _____

MEDICAL DIRECTOR'S SIGNATURE _____ DATE OF SIGNING _____

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Components of a Standing Orders Protocol (8)

How to report possible adverse events
occurring after vaccination

8 Report All Adverse Events to VAERS

Report all adverse events following the administration of influenza vaccine to the federal Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov. Forms are available on the website or by calling (800) 822-7967.

[Home](#) | [Contact Us](#) | [Help](#) | [en Español](#)

VAERS

Vaccine Adverse Event Reporting System

Search web site: [Search ▶](#)

[Report an Adverse Event](#) | [About VAERS](#) | [VAERS Data](#) | [Vaccine Resources](#) | [Information for Healthcare Professionals](#) | [Information for U.S. States and Territories](#) | [Information for Vaccine Manufacturers](#)

The **Vaccine Adverse Event Reporting System (VAERS)** is a national vaccine safety surveillance program co-sponsored by the Centers for Disease Control and Prevention ([CDC](#)) and the Food and Drug Administration ([FDA](#)). VAERS is a post-marketing safety surveillance program, collecting information about adverse events (possible side effects) that occur after the administration of vaccines licensed for use in the United States.

VAERS provides a nationwide mechanism by which adverse events following immunization may be reported, analyzed, and made available to the public. VAERS also provides a vehicle for disseminating [vaccine safety](#)-related information to parents and guardians, health care providers, vaccine manufacturers, state vaccine programs, and other constituencies. [more...](#)

Have you or your child had a reaction following vaccination?

1. Contact your health care provider
2. [Report the reaction ▶](#)
3. [Submit Follow-Up Information ▶](#)
4. Visit the [National Vaccine Injury Compensation](#) (if appropriate)

Important note: CDC and FDA do not provide individual medical treatment, advice, or diagnosis. If you need individual medical or health care advice, consult a qualified health care provider.

¿Ha tenido usted o su hijo una reacción adversa después de recibir una vacuna?

1. Contacte a su proveedor de salud
2. [Reporte una reacción adversa ▶](#)
3. Visite el [Programa Nacional de Compensación por Daños Derivados de Vacunas](#) (si es necesario)

[Search VAERS Data ▶](#)

VAERS Data last updated: **09/14/2015**



Featured Resources

Seasonal Flu Update

- [Summary of 2015-2016 Influenza Vaccine Information](#)

Government Agencies

- [Immunization Safety Office](#)
- [National Center for Immunization and Respiratory Diseases](#)

vaers.hhs.gov

Components of a Standing Orders Protocol (9)

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

Standing Orders Authorization

This policy and procedure shall remain in effect for all patients of the _____
NAME OF PRACTICE OR CLINIC

until rescinded or until _____.
DATE

Medical Director's signature _____ Signature date _____ Effective date _____

Do standing orders improve vaccination rates?

Are Standing Orders Effective?

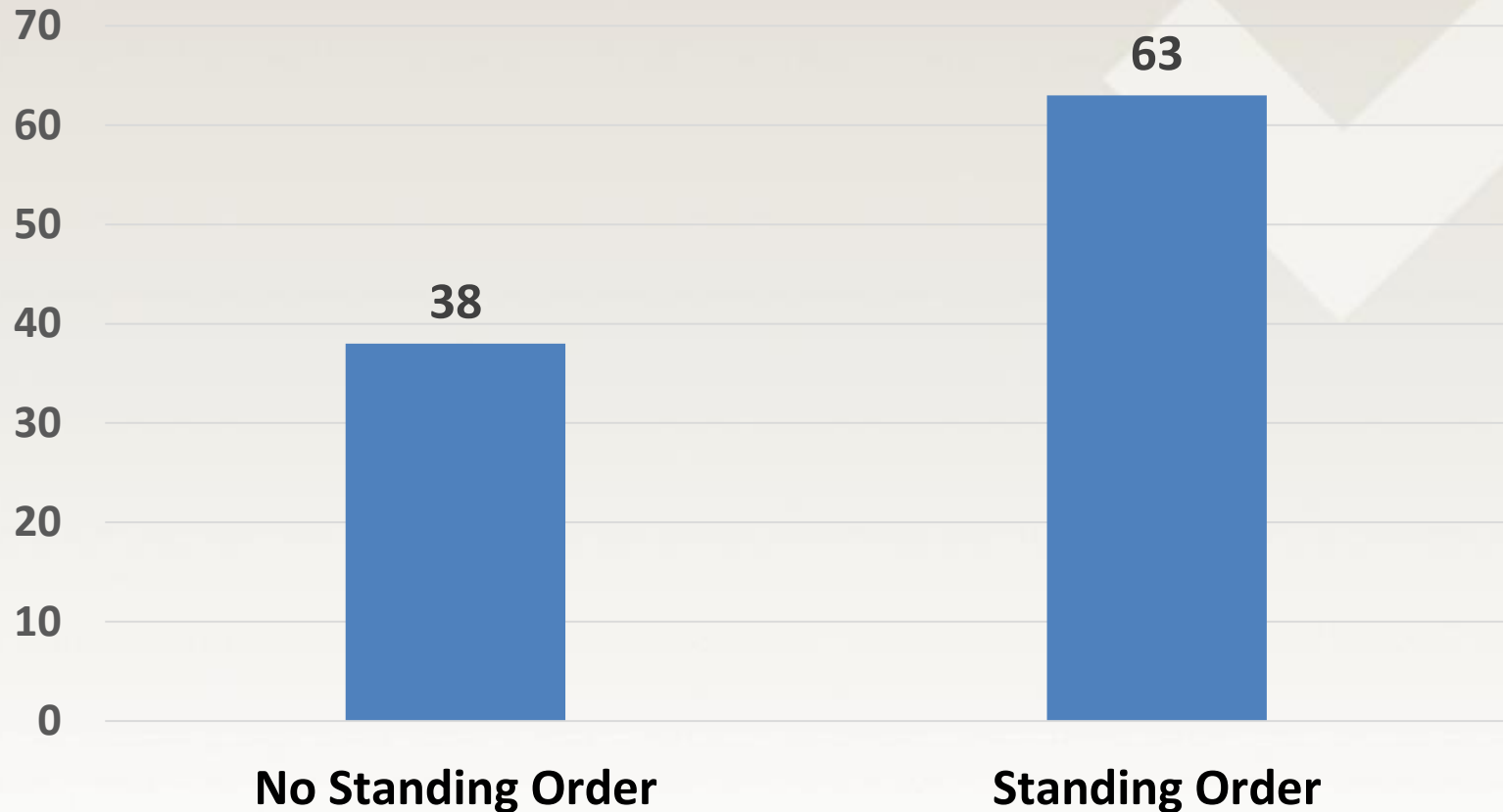
- Based on a review of 29 studies (1997-2009) that examined standing orders either alone or combined with other activities, the Community Prevention Services Task Force found:
 - **used alone**, standing orders increased adult vaccination coverage by a median of 17 percentage points (range, 13% to 30%)
 - **used in combination** with other interventions,* standing orders increased adult vaccination coverage by a median of 31 percentage points (range, 13% to 43%)
- * Such as expanding access in healthcare settings, client reminder and recall systems, clinic-based education, provider education, provider reminder and recall systems, or provider assessment plus feedback

www.thecommunityguide.org/vaccines/standingorders.html

Are Standing Orders Effective? (cont.)

- Based on a review of 29 studies (1997-2009) that examined standing orders either alone or combined with other activities, the Community Prevention Services Task Force found:
 - standing orders were effective in **increasing vaccination rates** when implemented in a range of clinical settings, among various providers and patient populations
 - standing orders were effective for **vaccine delivery** to children (universally recommended vaccinations) and adults (influenza and pneumococcal)

Example 1: Use of Standing Orders for Influenza Vaccine in an Ambulatory Care Setting



Percentage of Patients Vaccinated With and Without a Standing Order

Goebel LJ et al. *J Am Geriatr Soc* 2005;53:1008-10

Example 2: Impact of Standing Orders on Adolescent Vaccination Rates, Denver Health, 2013

Vaccine	National (2013)	Colorado (2013)	Denver Health (2013)
Tdap	86.0	87.1	95.9
MCV4	77.8	73.6	93.5
HPV – Females ≥ 1	57.3	58.2	89.8
HPV – Females ≥ 3	37.6	39.1	66.0
HPV – Males ≥ 1	34.6	33.5	89.3
HPV – Males ≥ 3	13.9	9.9	52.5

How do standing orders benefit medical practices?

Standing Orders in Clinical Practice

- **Efficiency**
 - Clinician time is not required to assess vaccination needs and issue verbal or written orders to vaccinate
 - Nurses (or others) take charge of vaccination program
- **Increased number of patients seen = increased income stream**
- **Patient safety**
 - improved vaccine coverage, less vaccine-preventable disease

Summary: Standing Orders Protocols

- Standing orders can improve vaccine coverage levels among adults in a variety of settings.
- Use of standing orders is endorsed by major vaccine policy-making institutions.
- Standing orders are not difficult to implement but require the “buy in” of everyone in the office.
- Use of standing orders is facilitated by having an Immunization Champion on the staff.

Standing Orders for all routine vaccines are available on the IAC website

Immunization Action Coalition

Google™ Site Search

Search

Handouts for Patients & Staff

Clinic Resources

Vaccine Information Statements

Diseases & Vaccines

Talking about Vaccines

Topics

IAC Home | Handouts | Clinic Resources | [Standing Orders for Administering Vaccines](#)

www.immunize.org/standing-orders

Handouts: Clinic Resources

Standing Orders for Administering Vaccines

Administering Vaccines

Adult Vaccination

- >> Administering vaccines
- >> Documenting vaccination
- >> Patient-friendly schedules
- >> Screening questionnaires
- >> Standing orders
- >> Vaccine summaries
- >> Vaccine recommendations

Documenting Vaccination

Parent Handouts

Patient Schedules

Questions and Answers

Recommendations

Screening Questionnaires

Standing Orders

Storage and Handling



Using standing orders for administering vaccines: What you should know
FAQ provides an overview for healthcare professionals about the use of standing orders for vaccination [#P3086]

Chickenpox (varicella) vaccine - Children and teens

Eligible health professionals may vaccinate children and teens who meet any of the criteria on this form [#P3080A]

Chickenpox (varicella) vaccine - Adults

Eligible health professionals may vaccinate adults who meet any of the criteria on this form [#P3080]

Diphtheria, tetanus, acellular pertussis vaccine (DTaP) - Infants and Children

Eligible health professionals may vaccinate children under 7 who meet any of the criteria on this form [#P3073]

Hepatitis A vaccine - Children and teens

Eligible health professionals may vaccinate children and teens who meet any of the criteria on this form [#P3077A]

Hepatitis A vaccine - Adults

Eligible health professionals may vaccinate adults who meet any of the criteria on this form [#P3077]

Standing Orders for Administering Hepatitis B Vaccine in Children & Teens

Purpose: Standing orders are written protocols for routine or non-routine administration of vaccines and other services. They are developed by the IAC and are intended to be used by healthcare providers in their offices.

Policy: Standing orders are written protocols for routine or non-routine administration of vaccines and other services. They are developed by the IAC and are intended to be used by healthcare providers in their offices.

Procedure:

1. Identify eligible children, adolescents, and teens who have not begun or have not completed hepatitis B vaccination.

2. Review all patients for vaccination status and administer hepatitis B vaccine.

3. **Contraindications:** History of severe allergic reaction to any component of the vaccine or to any component of any vaccine.

4. **Exclusion:** Children or adolescents who are immunocompromised or have a condition that may affect the immune system.

5. **Documentation:** Document all vaccine administration in the patient's medical record.

6. **Storage and Handling:** Store all vaccines in a cool, dry place at all times.

7. **Reporting:** Report all vaccine administration to the appropriate health department.

8. **Review:** Review all vaccine administration status at least once a year.

9. **Training:** All healthcare providers who administer vaccines must be trained and certified.

10. **Consent:** Obtain informed consent from the patient or parent/guardian before administering any vaccine.

11. **Follow-up:** Schedule follow-up appointments for all patients who have not completed their vaccination.

12. **Review:** Review all vaccine administration status at least once a year.

13. **Reporting:** Report all vaccine administration to the appropriate health department.

14. **Storage and Handling:** Store all vaccines in a cool, dry place at all times.

15. **Training:** All healthcare providers who administer vaccines must be trained and certified.

16. **Consent:** Obtain informed consent from the patient or parent/guardian before administering any vaccine.

17. **Follow-up:** Schedule follow-up appointments for all patients who have not completed their vaccination.

18. **Review:** Review all vaccine administration status at least once a year.

19. **Reporting:** Report all vaccine administration to the appropriate health department.

20. **Storage and Handling:** Store all vaccines in a cool, dry place at all times.

21. **Training:** All healthcare providers who administer vaccines must be trained and certified.

22. **Consent:** Obtain informed consent from the patient or parent/guardian before administering any vaccine.

23. **Follow-up:** Schedule follow-up appointments for all patients who have not completed their vaccination.

24. **Review:** Review all vaccine administration status at least once a year.

25. **Reporting:** Report all vaccine administration to the appropriate health department.

26. **Storage and Handling:** Store all vaccines in a cool, dry place at all times.

27. **Training:** All healthcare providers who administer vaccines must be trained and certified.

28. **Consent:** Obtain informed consent from the patient or parent/guardian before administering any vaccine.

29. **Follow-up:** Schedule follow-up appointments for all patients who have not completed their vaccination.

30. **Review:** Review all vaccine administration status at least once a year.

31. **Reporting:** Report all vaccine administration to the appropriate health department.

32. **Storage and Handling:** Store all vaccines in a cool, dry place at all times.

33. **Training:** All healthcare providers who administer vaccines must be trained and certified.

34. **Consent:** Obtain informed consent from the patient or parent/guardian before administering any vaccine.

35. **Follow-up:** Schedule follow-up appointments for all patients who have not completed their vaccination.

36. **Review:** Review all vaccine administration status at least once a year.

37. **Reporting:** Report all vaccine administration to the appropriate health department.

38. **Storage and Handling:** Store all vaccines in a cool, dry place at all times.

39. **Training:** All healthcare providers who administer vaccines must be trained and certified.

40. **Consent:** Obtain informed consent from the patient or parent/guardian before administering any vaccine.

41. **Follow-up:** Schedule follow-up appointments for all patients who have not completed their vaccination.

42. **Review:** Review all vaccine administration status at least once a year.

43. **Reporting:** Report all vaccine administration to the appropriate health department.

44. **Storage and Handling:** Store all vaccines in a cool, dry place at all times.

45. **Training:** All healthcare providers who administer vaccines must be trained and certified.

46. **Consent:** Obtain informed consent from the patient or parent/guardian before administering any vaccine.

47. **Follow-up:** Schedule follow-up appointments for all patients who have not completed their vaccination.

48. **Review:** Review all vaccine administration status at least once a year.

49. **Reporting:** Report all vaccine administration to the appropriate health department.

50. **Storage and Handling:** Store all vaccines in a cool, dry place at all times.

51. **Training:** All healthcare providers who administer vaccines must be trained and certified.

52. **Consent:** Obtain informed consent from the patient or parent/guardian before administering any vaccine.

53. **Follow-up:** Schedule follow-up appointments for all patients who have not completed their vaccination.

54. **Review:** Review all vaccine administration status at least once a year.

55. **Reporting:** Report all vaccine administration to the appropriate health department.

56. **Storage and Handling:** Store all vaccines in a cool, dry place at all times.

57. **Training:** All healthcare providers who administer vaccines must be trained and certified.

58. **Consent:** Obtain informed consent from the patient or parent/guardian before administering any vaccine.

59. **Follow-up:** Schedule follow-up appointments for all patients who have not completed their vaccination.

60. **Review:** Review all vaccine administration status at least once a year.

Preview of handout



Resources

- ***Take A Stand™***
 - www.standingorders.org
- **Immunization Action Coalition**
 - www.immunize.org
- **IAC Weekly Updates Via Email**
 - www.immunize.org/subscribe
- **Standing Orders Protocol Templates**
 - www.immunize.org/standing-orders