



# Recommendations for Zoster Vaccine

**MA Annual Adult Immunization Conference  
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<b>Other Financial or Material Interest</b>	<b>No relevant conflicts of interest to declare or relevant conflict</b>

**The speaker will discuss the use of vaccines in a manner not approved by the U.S. Food and Drug Administration. But in accordance with ACIP recommendations**

# Objectives

- Shingles Vaccine Resources
- Shingles Vaccine Storage
- Shingles Vaccine Recommendations
  - Indications
  - Safety and Efficacy
  - Contraindications

# ACIP recommendations

- “ACIP recommendations represent the standard of care for vaccination practice in the U.S. In general, to determine recommendations for use, one should follow the recommendations of ACIP rather than the information in the package insert.”

Ask the Experts:

[http://www.immunize.org/askexperts/experts\\_per.asp](http://www.immunize.org/askexperts/experts_per.asp)

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**CDC** Department of Health and Human Services  
Centers for Disease Control and Prevention

CDC en Español

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## Vaccines & Immunizations

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## Recommendations and Guidelines

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**Advisory Committee on Immunization Practices (ACIP)**

The ACIP develops written recommendations for the routine administration of vaccines, along with schedules regarding the appropriate timing, dosage, & contraindications... [more](#)

- [ACIP Meetings](#) (agendas, registration, presentations, etc.)
- [ACIP Recommendations](#)



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- > [Contraindications to Vaccinations](#)

http://www.cdc.gov/vaccines/ 100%

# Recommendations of the Advisory Committee on Immunization Practices

[www.cdc.gov/vaccines/recs/acip](http://www.cdc.gov/vaccines/recs/acip)

# Contraindications & Precautions

- **Summary Table published annually by CDC with US adult schedule in MMWR.** (CDC. MMWR 2013; Vol.62, No.1.)

<http://www.cdc.gov/vaccines/schedules/downloads/child/mmwr-0-18yrs-catchup-schedule.pdf>

TABLE. Contraindications and precautions to commonly used vaccines in adults<sup>1-6</sup>

Vaccine	Contraindications	Precautions
Influenza, inactivated vaccine (IIV)	Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine or to a vaccine component, including egg protein.	Moderate or severe acute illness with or without fever. History of Guillain-Barre Syndrome (GBS) within 6 weeks of previous influenza vaccination. Persons who experience only hives with exposure to eggs should receive IIV with additional safety precautions. <sup>2</sup>
Influenza, live attenuated (LAIV) <sup>3</sup>	Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine or to a vaccine component, including egg protein. Conditions for which the Advisory Committee on Immunization Practices (ACIP) recommends against use, but which are not contraindications in vaccine package insert: immune suppression, certain chronic medical conditions such as asthma, diabetes, heart or kidney disease, and pregnancy. <sup>4</sup>	Moderate or severe acute illness with or without fever. History of GBS within 6 weeks of previous influenza vaccination. Receipt of specific antivirals (i.e., amantadine, rimantadine, zanamivir, or oseltamivir) 48 hours before vaccination. Avoid use of these antiviral drugs for 14 days after vaccination.
Tetanus, diphtheria, pertussis (Tdap); tetanus, diphtheria (Td)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. For pertussis-containing vaccines: encephalopathy (e.g., coma, decreased level of consciousness, or prolonged seizures) not attributable to another identifiable cause within 7 days of administration of a previous dose of Tdap or diphtheria and tetanus toxoids and pertussis (DTP) or diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine.	Moderate or severe acute illness with or without fever. GBS within 6 weeks after a previous dose of tetanus toxoid-containing vaccine. History of arthus-type hypersensitivity reactions after a previous dose of tetanus or diphtheria toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus toxoid-containing vaccine. For pertussis-containing vaccines: progressive or unstable neurologic disorder, uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized.
Varicella <sup>2</sup>	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, or long-term immunosuppressive therapy <sup>5</sup> or patients with human immunodeficiency virus (HIV) infection who are severely immunocompromised). Pregnancy.	Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product). <sup>5,7</sup> Moderate or severe acute illness with or without fever. Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination; avoid use of these antiviral drugs for 14 days after vaccination.
Human papillomavirus (HPV)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component.	Moderate or severe acute illness with or without fever. Pregnancy.
Zoster	Severe allergic reaction (e.g., anaphylaxis) to a vaccine component. Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, or long-term immunosuppressive therapy <sup>5</sup> or patients with HIV infection who are severely immunocompromised). Pregnancy.	Moderate or severe acute illness with or without fever. Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination; avoid use of these antiviral drugs for 14 days after vaccination.
Measles, mumps, rubella (MMR) <sup>3</sup>	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, or long-term immunosuppressive therapy <sup>5</sup> or patients with HIV infection who are severely immunocompromised). Pregnancy.	Moderate or severe acute illness with or without fever. Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product). <sup>5,7</sup> History of thrombocytopenia or thrombocytopenic purpura. Need for tuberculin skin testing. <sup>8</sup>

See footnotes on page 18.



## Download Full Guide:

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(Updated: May 4)

### SECTION 1 Practice Improvement

[Download Section 1 - Practice Improvement](#) (51.9 MB)

#### Topics covered:

- Immunization and the Chronic Care Model
- PDSA and Rapid Cycles of Change
- Measuring Change in Your Practice
- Incorporating Run Charts Into Daily Practice

### SECTION 2 Practical Advice

[Download Section 2 - Practical Advice](#) (61.5 MB)

## Welcome to the ACP Immunization Portal

### ACP Guide to Adult Immunization

Produced by faculty of ACP's Quality Improvement Programs and members of the ACP Adult Immunization Advisory Board, the ACP Guide to Adult Immunization will help you develop systematic processes for incorporating immunization in your day-to-day practice.

The Guide is divided into four sections:

- Section 1: Quality Improvement Principles in Immunization
- Section 2: Resources for Practical Application
- Section 3: Recommended Adult Vaccines and Their Indications
- Section 4: Special Populations (Pregnant Women, Immunocompromised, etc.)

Our intention is that this Guide will be read by and shared among the entire office team. You may find that Sections 1 and 2 are more beneficial to administrators and office staff, while physicians, physician assistants, nurse practitioners, and nurses may want to concentrate on Sections 3 and 4. Attending physicians and their residents will find residency clinic-specific information in Section 2.

## Sections

1. Practice Improvement
2. Practical Advice
3. Vaccines and Their Indications (**Zoster Vaccine too!**)
4. Special Populations
  - Women who are Pregnant or Breastfeeding
  - Immunocompromised Persons
  - Patients with Anatomical or Functional Asplenia
  - Childhood Catch-up
  - Health Care Workers (HCWs)

American College of  
Physicians →  
*Guide to Adult  
Immunizations*

Go to: Immunization Portal

[www.acponline.org](http://www.acponline.org)

<http://immunization.acponline.org>



# Immunization Action Coalition

[www.immunize.org](http://www.immunize.org)



## Most Popular

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13. Talking About Vaccines
14. State Laws
15. ACIP Recommendations

## IAC Publications

- ➔ Needle Tips **NEW**
- ➔ Vaccinate Adults **NEW**
- ➔ IAC Express - Email news



## Ask the Experts

Experts from CDC answer challenging and timely questions about vaccines and their administration

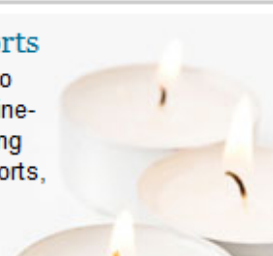
- ➔ Questions & Answers



## Unprotected People Reports

Real-life accounts of people who have suffered or died from vaccine-preventable diseases: compelling personal testimonies, case reports, and articles

- ➔ Read Reports



**Series:** Understanding risk communication theory and having tools such as the CASE model encourages fruitful discussion with families about their vaccine safety concerns. The series of videos introduce risk communication and the CASE model, role play two examples of the CASE model in action, and provide feedback on each of the scenarios. These can be viewed individually or as part of a larger group for discussion.

[Visit the VOTW archive](#)

## OFFICIAL INFORMATION

AAP Policy Statements  
ACIP Recommendations  
FDA Product Approval

State Information

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## RESOURCES



# IAC Resources Zoster Vaccine

## Ask the Experts Zoster Vaccine

[http://www.immunize.org/askexperts/experts\\_zos.asp](http://www.immunize.org/askexperts/experts_zos.asp)

## Screening Checklist Adults Vaccines

<http://www.immunize.org/catg.d/p4065.pdf>

## Standing Orders Zoster Vaccine

<http://www.immunize.org/catg.d/p3092.pdf>

### Ask the Experts

#### Zoster (shingles)

Vaccine-related information and recommendations

Administering vaccine

Disease-related issues

Vaccine storage and handling

Precautions & contraindications

Vaccine-related information and recommendations

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#### To whom should shingles vaccine be given?

A single dose of zoster vaccine is recommended for adults age 60 years and older whether or not they report a prior episode of herpes zoster. Persons with chronic medical conditions may be vaccinated unless a contraindication or precaution exists for their condition. For a copy of the ACIP recommendations on zoster vaccine, go to [www.cdc.gov/mmwr/PDF/rr/r57e0515.pdf](http://www.cdc.gov/mmwr/PDF/rr/r57e0515.pdf)

What do you think about giving zoster vaccine to nursing home patients? Should healthcare personnel in nursing homes be tested to see if they have had chickenpox before taking care of someone who has received zoster vaccine? Zoster vaccine can be administered to anyone age 60 years and older regardless of where they reside, unless they have a contraindication to vaccination. All healthcare personnel should ensure they are immune to varicella regardless of the setting in which they work and regardless of their patients' receipt of zoster vaccine.

The new Zostavax vaccine (Merck) package insert says that Zostavax should not be given simultaneously with pneumococcal polysaccharide vaccine (PPSV). What does ACIP say about this?

Patient name: \_\_\_\_\_ Date of birth: \_\_\_\_\_ (mo) (day) (yr)

### Screening Checklist for Contraindications to Vaccines for Adults

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

	Yes	No	Don't know
1. Are you allergic to:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you have allergic reactions to medications, food, a vaccine component, or latex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have you ever had a serious reaction after receiving a vaccination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you have long-term health problems with heart disease, lung disease, asthma, kidney disease, metabolic disease (e.g., diabetes), anemia, or other blood disorders?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you have cancer, leukemia, HIV/AIDS, or any other immune system problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. In the past 3 months, have you taken medications that weaken your immune system, such as corticosteroids, prednisone, other steroids, or anticancer drugs, or have you had radiation treatment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Have you had a seizure or a brain or other nervous system problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. During the past year, have you received a transfusion of blood or blood products, or been given immune (gamma) globulin or an antiviral drug?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. For women: Are you pregnant or is there a chance you could become pregnant?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Standing Orders for Administering Zoster Vaccine to Adults

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

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

#### Procedure

1. Identify adults who are age 60 years or older and have no history of prior receipt of zoster vaccine.

2. Screen all patients for contraindications and precautions to zoster vaccine:

a. Contraindications:

- a history of a serious reaction to a vaccine component, including gelatin and neomycin. For a list of vaccine components, go to [www.cdc.gov/mmwr/preview/mmwrhtml/rr57e0515a.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e0515a.htm) or [www.immunize.org/influenza-table-2.pdf](http://www.immunize.org/influenza-table-2.pdf).
- primary or severe immunodeficiency, including:
  - leukemia, lymphoma, or other malignant neoplasms affecting the bone marrow or lymphatic system
  - AIDS or other clinical immunodeficiencies of HIV, including persons with CD4+ T-lymphocyte values  $\leq 200$  cells/mm<sup>3</sup> or  $\leq 15\%$  of total lymphocytes
  - current immunosuppressive therapy, including high-dose corticosteroids ( $\geq 20$  mg/day of prednisone or equivalent) lasting two or more weeks
  - clinical or laboratory evidence of other unspecified cellular immunodeficiency
  - receipt of or history of hematopoietic stem cell transplantation
  - receipt or receipt of nonhuman human immune globulin and immune modulators, especially the anti-tumor necrosis factor agents infliximab, infliximab, and etanercept
- pregnancy or possibility of pregnancy within 4 weeks of receiving vaccine

b. Precautions: moderate or severe acute illness with or without fever

3. Provide all patients with a copy of the most current Federal Vaccine Information Statement (VIS). Although not required by federal law, it is prudent to document in the patient's medical record or office log, the publication date of the VIS and the date it was given to the patient. Provide non-English speaking patients with a copy of the VIS in their native language, if available; these can be found at [www.immunize.org/vis](http://www.immunize.org/vis).

4. Administer vaccine amount (approximately 0.65 mL) of recombinant zoster vaccine subunit (RZV) (Zosherix, Novartis) in the port and end of the upper arm.

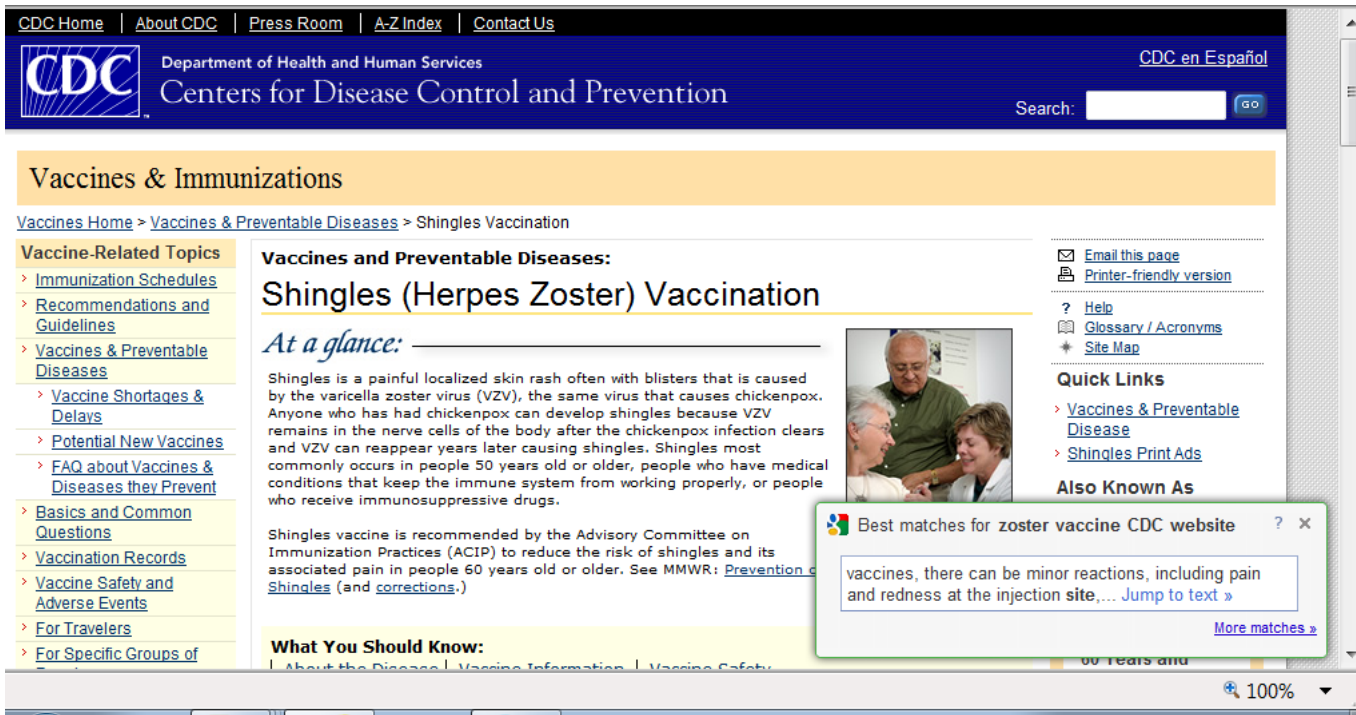
5. Document each patient's vaccine administration information and follow up in the following phases:

- a. Medical file: Record the date the vaccine was administered, the manufacturing lot number, the vaccination site and date, and the name and title of the person administering the vaccine. If vaccine was not given, provide a reason for non receipt of the vaccine (e.g., medical contraindication, patient refusal).
- b. Personal immunization record: 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 zoster vaccine to the Federal Vaccine Adverse Event Reporting System (VAERS) at [www.vaers.hhs.gov](http://www.vaers.hhs.gov) or by calling (800) 822-7967. VAERS report forms are available at [www.vaers.hhs.gov](http://www.vaers.hhs.gov).

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



## CDC Shingles Website

<http://www.cdc.gov/vaccines/vpd-vac/shingles/>

### Section for Healthcare Professionals

- Clinical Overview
- Diagnosis and Laboratory Testing
- Preventing Transmission in Health Care Settings
- Ask the Experts
- Vaccination Recommendations



# MMWR<sup>TM</sup>

**Morbidity and Mortality Weekly Report**

[www.cdc.gov/mmwr](http://www.cdc.gov/mmwr)

Early Release

May 15, 2008 / Vol. 57

## **Prevention of Herpes Zoster**

**Recommendations  
of the Advisory Committee on  
Immunization Practices (ACIP)**



DEPARTMENT OF HEALTH AND HUMAN SERVICES  
CENTERS FOR DISEASE CONTROL AND PREVENTION

<http://www.cdc.gov/mmwr/PDF/rr/rr5705.pdf>

# Herpes Zoster Vaccine (Zostavax)



- Reduces the risk of subsequent development of zoster, postherpetic neuralgia, other complications
- Contains live varicella vaccine virus in much larger amount (14x) than standard varicella vaccine (Varivax)
- Reconstitute with diluent provided and administer 0.65 mL subcutaneously (SC)
- May be administered with other vaccines

Package Insert:

<http://www.fda.gov/downloads/BiologicsBloodVaccines/Vaccines/ApprovedProducts/UCM132831.pdf>

# Varicella Containing Vaccines Storage & Handling



- Store lyophilized vaccine in freezer between -58°F and +5°F (-50°C and -15°C) at all times
  - Protect from light by storing in original box
  - Vaccine should ideally be stored in a stand alone freezer unit, but a unit with separate refrigerator/freezer compartments with exterior doors is acceptable
- Store diluent at room temperature or refrigerate
- Discard if not used within 30 minutes of reconstitution
- CDC and the manufacturer do NOT recommend transporting varicella or zoster vaccine.
- If they must be transported, use a portable freezer that maintains temps as above. Do NOT use dry ice.

Source: CDC Vaccine Storage and Handling Toolkit at:

<http://www.cdc.gov/vaccines/recs/storage/toolkit/storage-handling-toolkit.pdf>

# Zoster Vaccine Effectiveness

## Herpes Zoster Vaccine in Older Adults and the Risk of Subsequent Herpes Zoster Disease

Hung Fu Tseng, PhD, MPH

Ning Smith, PhD

Rafael Harpaz, MD, MPH

Stephanie R. Bialek, MD, MPH

Lina S. Sy, MPH

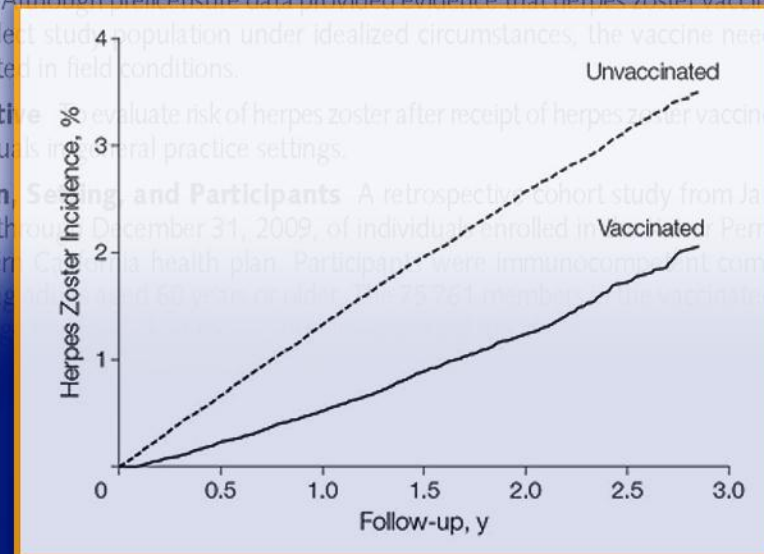
Steven J. Jacobsen, MD, PhD

**H**ERPES ZOSTER, COMMONLY known as shingles, is a painful condition caused by

**Context** Approximately 1 million episodes of herpes zoster occur annually in the United States. Although preliminary data provided evidence that herpes zoster vaccine works in a select study population under idealized circumstances, the vaccine needs to be evaluated in field conditions.

**Objective** To evaluate risk of herpes zoster after receipt of herpes zoster vaccine among individuals in real practice settings.

**Design, Setting, and Participants** A retrospective cohort study from January 1, 2007, through December 31, 2009, of individuals enrolled in Permanente Medical Group's health plan. Participants were immunocompetent community-dwelling individuals aged 60 years or older. Of 75 761 members, the vaccinated cohort were aged 60 years or older.



- 55% effective against zoster
- **NO** decline with age
- Effective among those with chronic medical conditions
- 63% effective against ophthalmic zoster
- 65% effective against zoster hospitalizations

# Zoster Vaccine Follow-up Safety Studies

- Follow-up of subset of original Shingles Vaccine Study cohort selected for safety monitoring (n~ 6,600 → 3,000, Simberkoff)<sup>1</sup>
- Case-centered study Vaccine Safety DataLink (n=190,083, Tseng)<sup>2</sup>
- Both studies no difference in serious side effects
  - e.g., cerebrovascular, cardiovascular, meningitis, encephalitis, Bell's Palsy, Ramsay-Hunt Syndrome, autoimmune, death, malignancy, etc.
- Simberkoff identifies herpes zoster in 7 vaccine recipients compared to 24 placebo
  - Specimens available from all but one
  - All 29 tested positive for **wild-type** virus
- Tseng identifies small risk nonserious allergic reactions

<sup>1</sup> Simberkoff. 2010 Annals;152(9):545. <sup>2</sup> Tseng. 2012 J IntMed;271:510.



# ACIP

## Recommendations for Zoster Vaccine



**New!!**

- On March 24, 2011 the FDA approved a label change for zoster vaccine to include persons 50 through 59 years of age
- ACIP declined to recommend vaccination of persons younger than 60 years because of inadequate supply and lower risk of zoster in this age group\*
- An ACIP recommendation is not necessary for clinicians to use a vaccine according to license

\* Off-label use  
CDC. MMWR 2008;57(RR-5):1-

# Zoster Vaccine Recommendations, cont.



- Adults 60 years and older should receive a single dose of zoster vaccine at the first available clinical encounter
  - 5-8 encounters per year for this age group
- Offer to all eligible, including frail, > 80 years, nursing home residents and those with chronic medical conditions
  - unless a contraindication or precaution exists
- Not intended for treatment of shingles

# Zoster Vaccine

## Recommendations, cont.

- It is not necessary to inquire about chickenpox or test for varicella immunity before administering zoster vaccine
  - A negative test is more likely to indicate waning antibody level rather than true susceptibility
- Persons 60 years of age and older can be assumed to be immune **regardless** of their recollection of chickenpox
- Need for booster dose or doses not known at this time

# Zoster Vaccine

## Contraindications

- Severe allergic reaction following a prior dose or to gelatin, neomycin or other vaccine component
- Pregnancy or planned pregnancy within 4 weeks
  - It is sufficient to ask a woman if she is pregnant
- Immunosuppression from any cause

# Zoster Vaccine Contraindications

## Immunosuppression,(1)

- Leukemia, lymphoma or other malignant neoplasm affecting the bone marrow or lymphatic system
- Immunosuppressive therapy, including high-dose chemotherapy, or corticosteroid therapy of  $\geq 20$  mg/kg/day for  $\geq 2$  weeks
- AIDS or other clinical manifestation of HIV infection
  - includes persons with CD4+ T-lymphocyte values less than 200 per mm<sup>3</sup> or less than 15% of total lymphocytes
  - Asx. or mildly Sx. HIV is **neither** an indication or contraindication
- Clinical or laboratory evidence of other cellular immune deficiencies

# Zoster Vaccine Contraindications

## Immunosuppression (2)

- Hematopoietic cell transplant recipients\*
  - experience is limited
  - assess the immune status of the recipient on a case-by-case basis
  - if a decision is made to vaccinate, the vaccine should be administered at least 24 months after transplantation



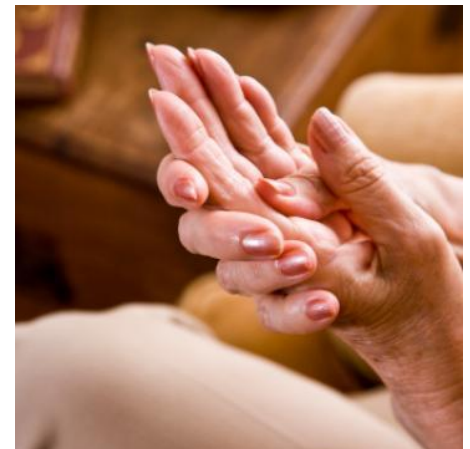
ADULT BONE-MARROW  
TRANSPLANT NEWS

\* Off-label use  
CDC. MMWR 2008;57(RR-5):1-

# Zoster Vaccine Contraindications

## Immunosuppression (3)

- Recombinant human immune mediators and immune modulators\*
  - Safety and efficacy of concurrently administering these is unknown
    - preferable to administer zoster vaccine before treatment
    - assess the immune status of the recipient on a case-by-case basis
    - vaccination should be deferred for at least 1 month after discontinuation of treatment





# Zoster Vaccine May Be Administered to:

- Leukemia/lymphoma in remission, if no chemo or radiation for 3 mos.
- Short-term corticosteroids(<14 days); low to moderate dose (<20 mg/day of prednisone or equivalent); topical; intra-articular, bursal, or tendon injections; or long-term alternate day treatments with low to moderate doses of short-acting systemic corticosteroids.
- Low doses of methotrexate ( $\leq 0.4$  mg/kg/week), azathioprine ( $\leq 0.3$  mg/kg/day), or 6-mercaptopurine ( $\leq 1.5$  mg/kg/day).
- Impaired humoral immunity (e.g., hypogammaglobulinemia or dysgammaglobulinemia)

# Zoster Vaccine Precautions

- Moderate or severe acute illness
- Current treatment with an antiviral drug active against herpes viruses
  - discontinue at least 24 hours before administration of zoster vaccine
  - avoid use for at least 14 days after vaccination
- Recent receipt of a blood product is **NOT** a precaution

# Zoster Vaccine

## Adverse Reactions

- Local reactions - 34%  
(pain, erythema)
- Rash, including injection site lesions
- No increased risk of fever
- No serious adverse reactions identified
- No transmission of virus from zoster vaccine recipients

# Zoster and Pneumococcal Polysaccharide (PPSV) Vaccines\*

- In 2009, zoster package insert changed and advises that zoster and PPSV should not be administered concurrently
- Based on a study that showed the titer against VZV was lower in persons who received zoster and PPSV at the same visit compared to persons who received these vaccines 4 weeks apart
- CDC has not changed its recommendation for either vaccine
- Zoster and PPSV should be administered at the same visit if the person is eligible for both vaccines

\* Off-label use

# Zoster and PPSV Vaccines

- Tseng observational study of over 7,000 patients in a large HMO  $\geq 60$  years
- Examined incidence of zoster among those who received zoster and PPSV vaccines on the same day or PPSV 30 to 365 days before zoster vaccine
- | <u>Vaccination</u> | <u>Incidence</u> (per 1,000 person years) |
|--------------------|---|
| – same day         | 4.55                                      |
| – different visits | 4.51                                      |

# For More Information

- Massachusetts Immunization Program

- 1-617-983-6800

- 1-888-658-2850

- Website [www.mass.gov/dph/imm](http://www.mass.gov/dph/imm)

- Ordering MDPH materials

- [http://www.mass.gov/Eeohhs2/docs/dph/cdc/educational\\_materials\\_catalog.pdf](http://www.mass.gov/Eeohhs2/docs/dph/cdc/educational_materials_catalog.pdf)

- CDC/NIP

- 1-800-232-4636 (1-800-CDC-INFO) for both English and Spanish

- 1-888-232-6348 TTY (M-F 10 AM – 10 PM)

- Website <http://www.cdc.gov/vaccines>