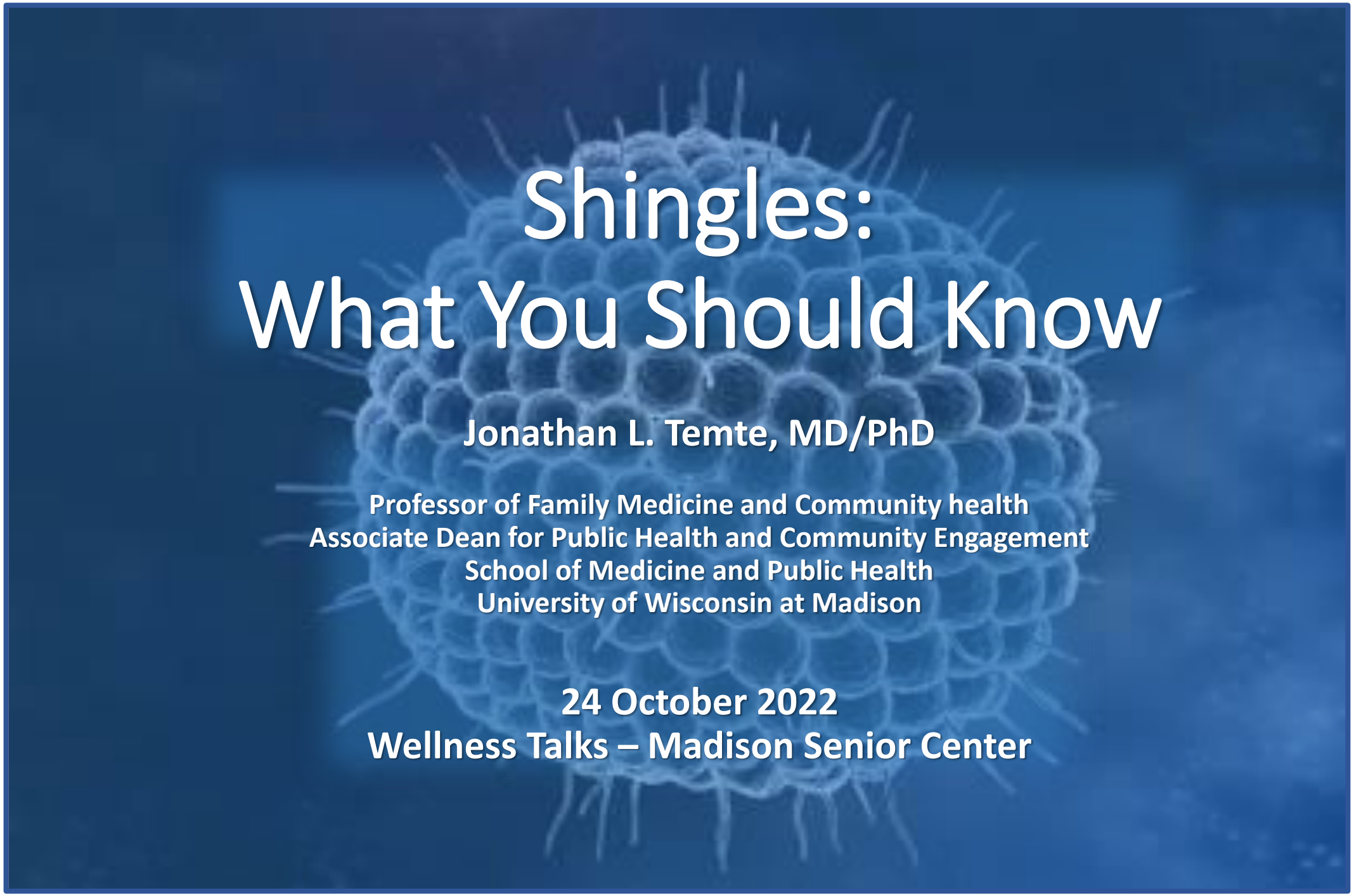
Shingles:
What You Should Know
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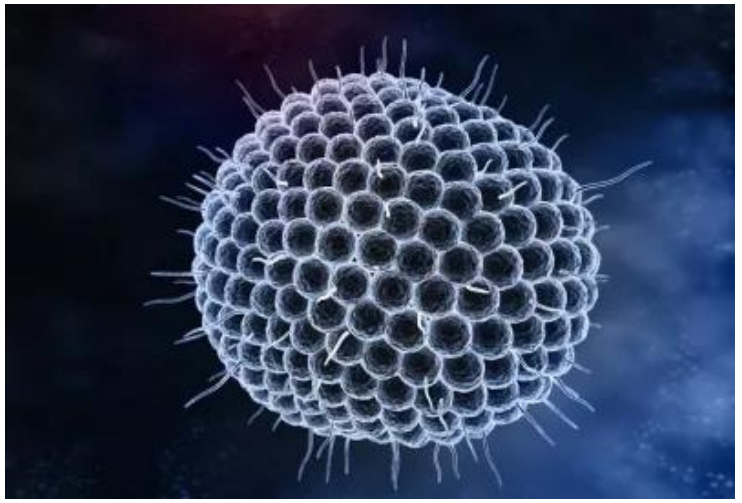
Wellness Talks – Madison Senior Center

Today's Discussion

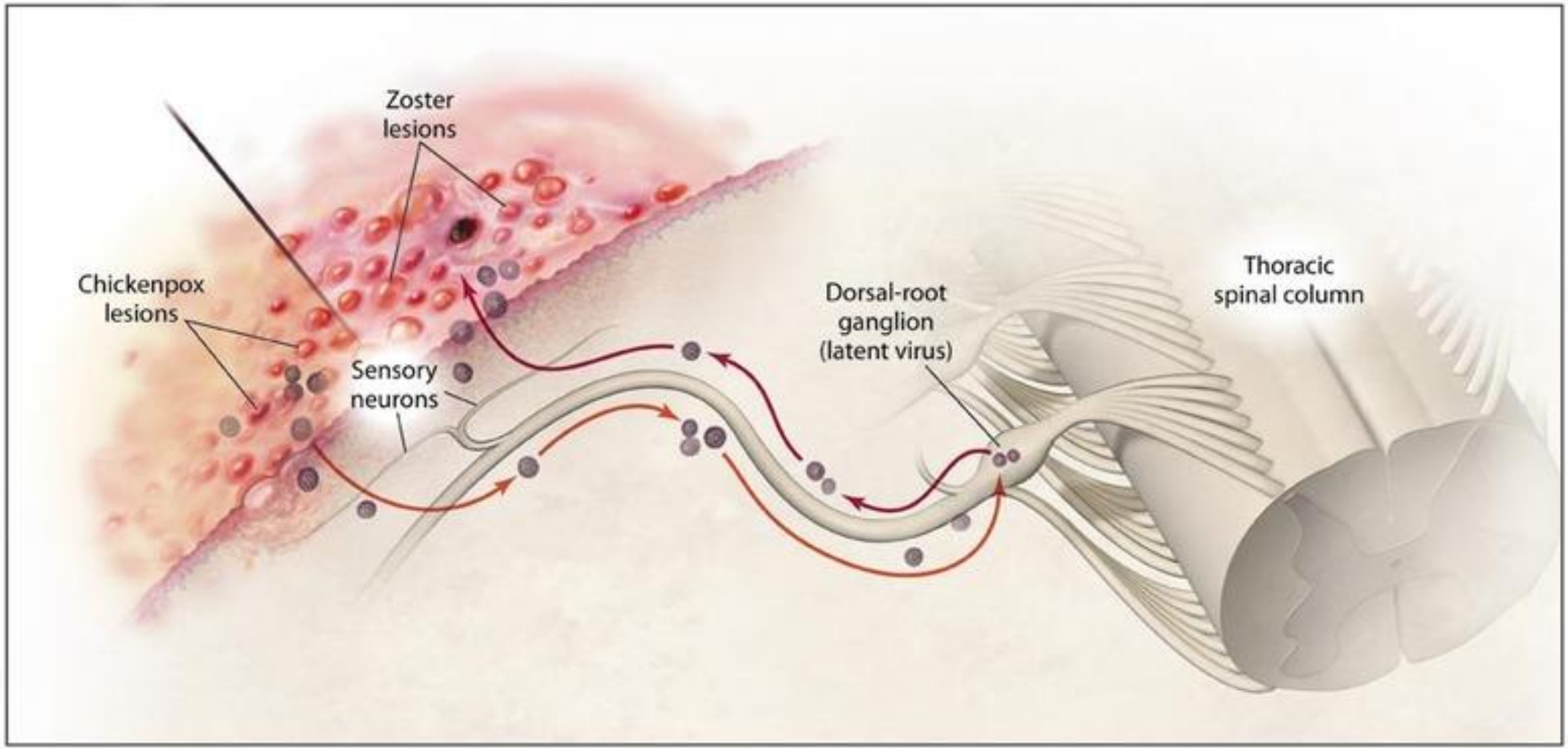
- Overview of shingles viral disease
- Recognition and treatment
- Risk factors for shingles
- Prevention with vaccines

What is Shingles?



- Also known as Herpes Zoster
- Caused by Varicella Zoster Virus (VZV)
- Primary infection with VZV causes highly contagious Chickenpox
- Reactivation causes Shingles: VZV can reactivate later in a person’s life and cause Shingles

Chickenpox to Shingles

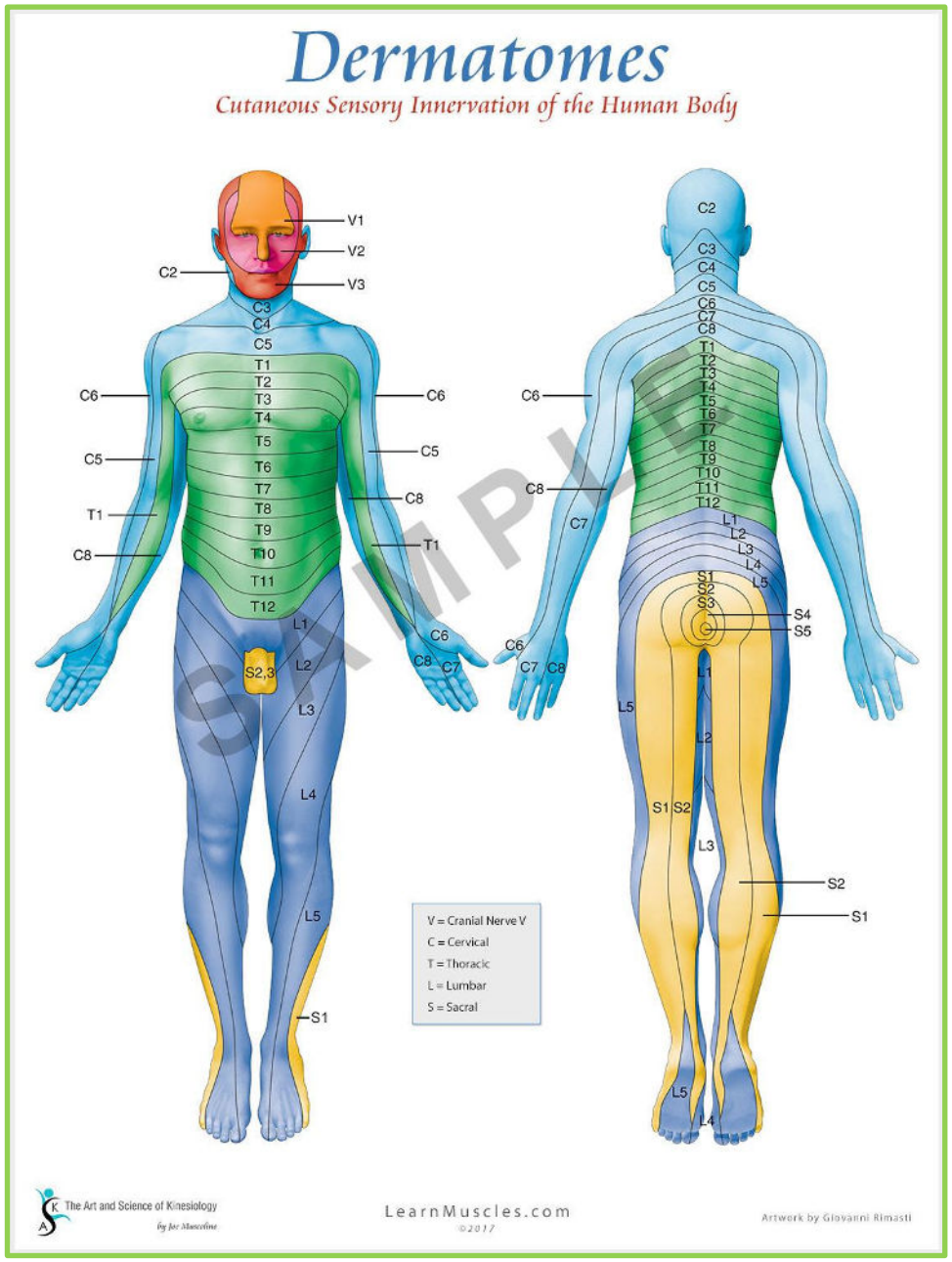


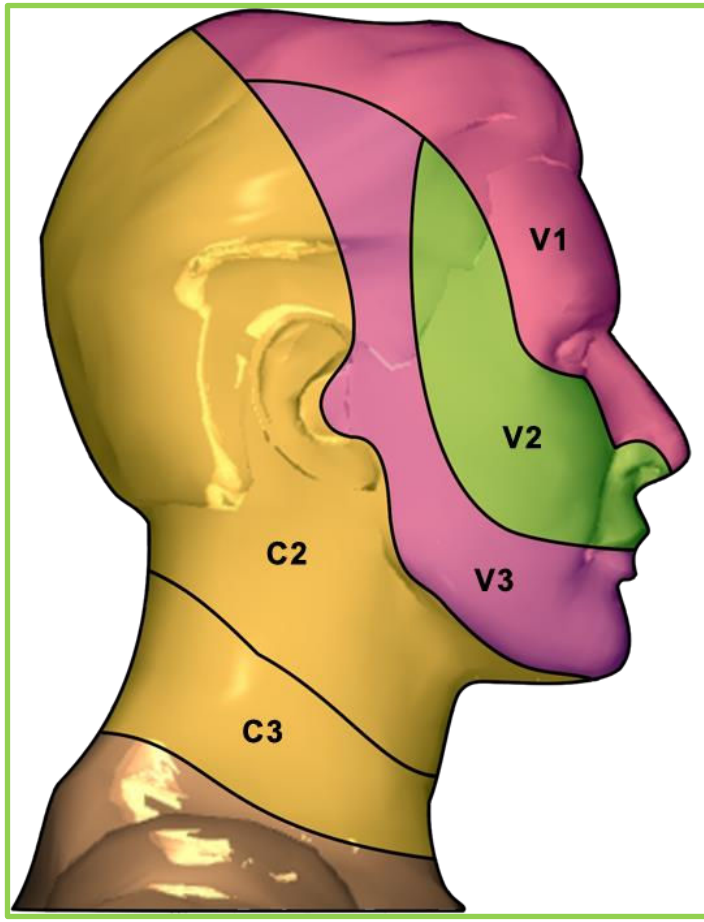
N Engl J Med 2007; 356:1338-1343 DOI: 10.1056/NEJMct066061

Symptoms

- Burning, throbbing or stabbing localized pain
  - days to weeks *before* the rash appears
- Rash: painful maculopapular – vesicular
  - along nerve pathways
  - typically unilateral: face or trunk
  - vesicles dry and heal in 2-4 weeks
- Fever
- Headache
- Photophobia – a condition where bright light hurts eyes
- Nausea

Nerve pathways: “Dermatomes”





Dermatome sectors on all diagrams are approximate due to the way sensory nerves naturally overlap in the body.

V1 - Ophthalmic Division of Trigeminal Nerve (Upper Face)
V2 - Maxillary Division of Trigeminal Nerve (Mid Face)
V3 - Mandibular Division of Trigeminal Nerve (Lower Face)

Upper Body Quarter

C2 - Occipital Protuberance
C3 - Supraclavicular Fossa

Examples of Shingles

Complications

- Postherpetic Neuralgia (PHN)
  - Most common complication
  - Mild to severe pain in the areas where shingles occurred
  - Constant or intermittent
  - May persist weeks, months, or even years
  - Can cause:
    - Sleep, mood, work disruption
    - Activities of daily living impairment
    - Social withdrawal and depression

- Postherpetic Neuralgia (PHN)
  - Risk factors include:
    - Age 50 & older
    - Severe pain at any time
      - (before or after onset of rash)
    - Extensive rash
    - Facial (trigeminal or ophthalmic) distribution of rash

Complications (continued)

- Herpes Zoster Ophthalmicus
  - Reactivation of shingles involving the eye
  - Represents 15% of shingles cases
  - If untreated, can cause vision loss or blindness

- Neurologic complications
  - Myelitis – inflammation of spinal cord
  - Encephalitis, Meningoencephalitis, Ventriculitis – inflammation in brain
  - Cranial nerve palsies – double vision
  - Ischemic stroke syndrome

Complications (continued)

- VZV viremia
  - Cutaneous dissemination (bilateral)
  - Pneumonia (lung infection), hepatitis (liver inflammation)
  - Disseminated intravascular coagulation (bleeding disorder)

- Dermatologic complications
  - Secondary rash infections
  - Permanent scarring and changes in pigmentation

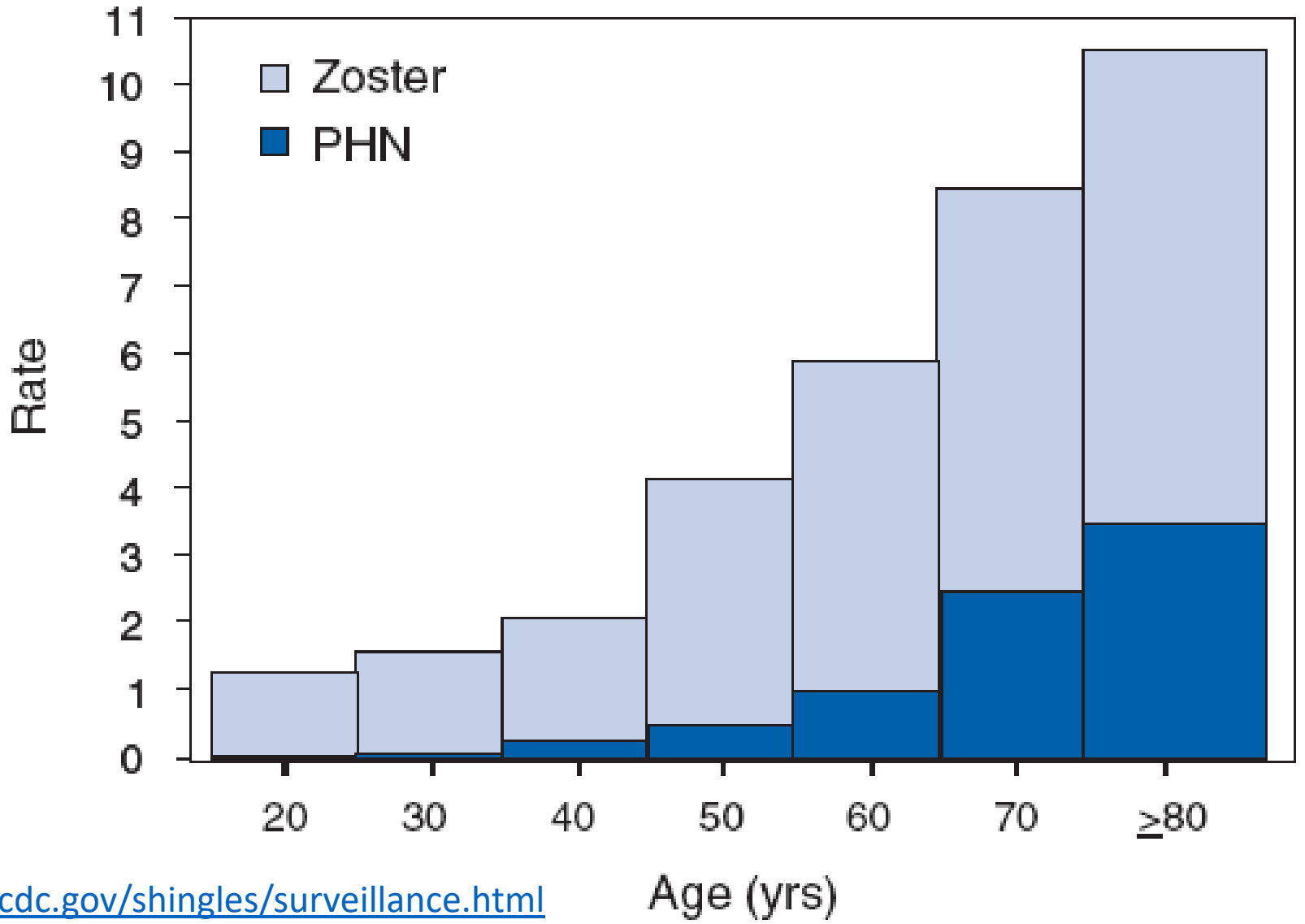
So… who is at risk of getting Shingles?

- Almost 1 out of every 3 people in the U.S. will develop shingles in their lifetime
- An estimated 1 million cases each year in the U.S.
- Anyone who has ever had chickenpox or the varicella vaccine can develop shingles

So… who is at higher risk of shingles?

- Risk increases as immunity declines:
  - Age
  - Stress (?)
  - Medical conditions
    - cancer
    - HIV
    - after bone marrow or solid organ transplantation
  - Immunosuppressive medications
    - Steroids (such as prednisone)
    - Chemotherapy
    - Transplant and connective tissue disease-related medications

Shingles and post-herpetic neuralgia increase with age

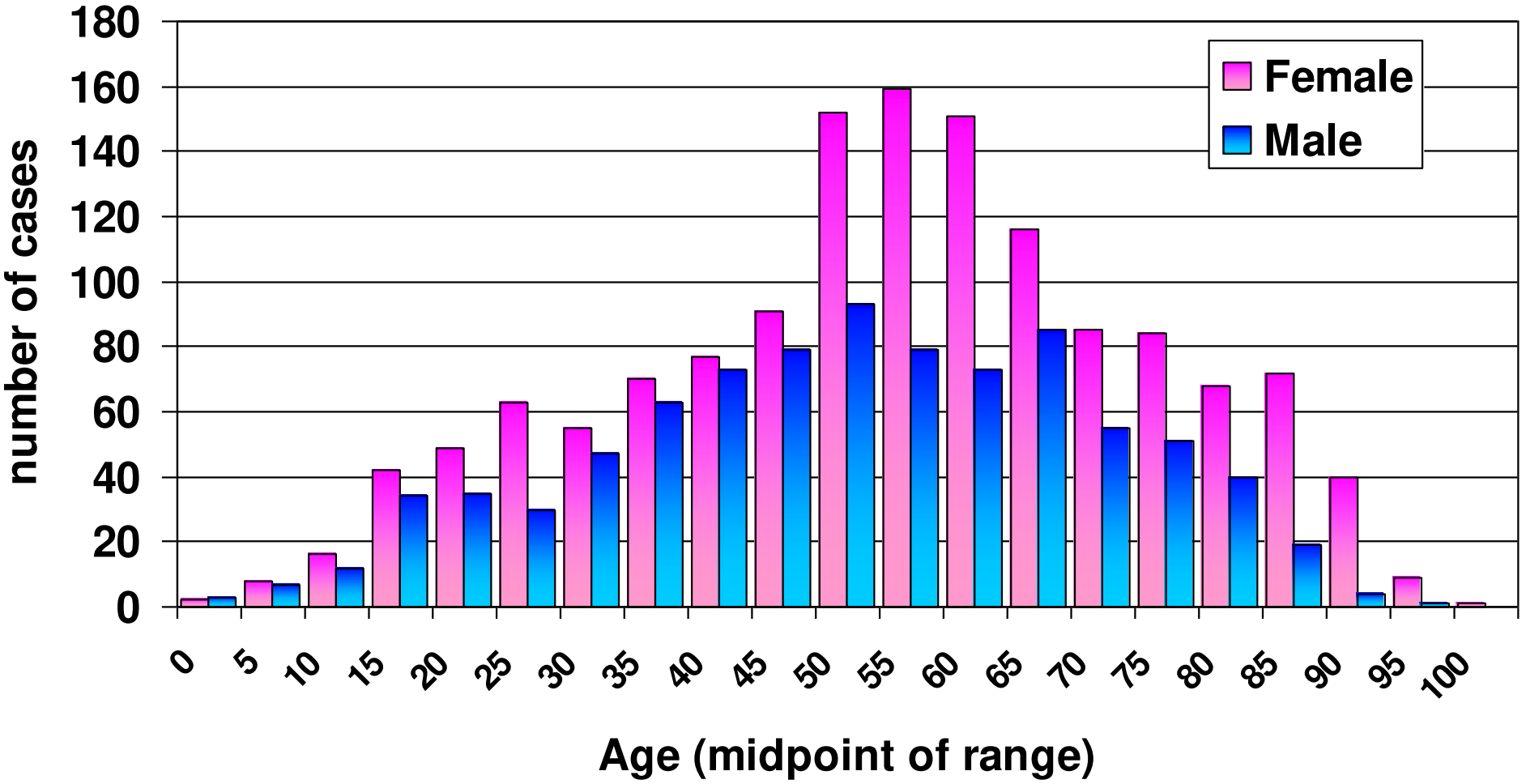


https://www.cdc.gov/shingles/surveillance.html

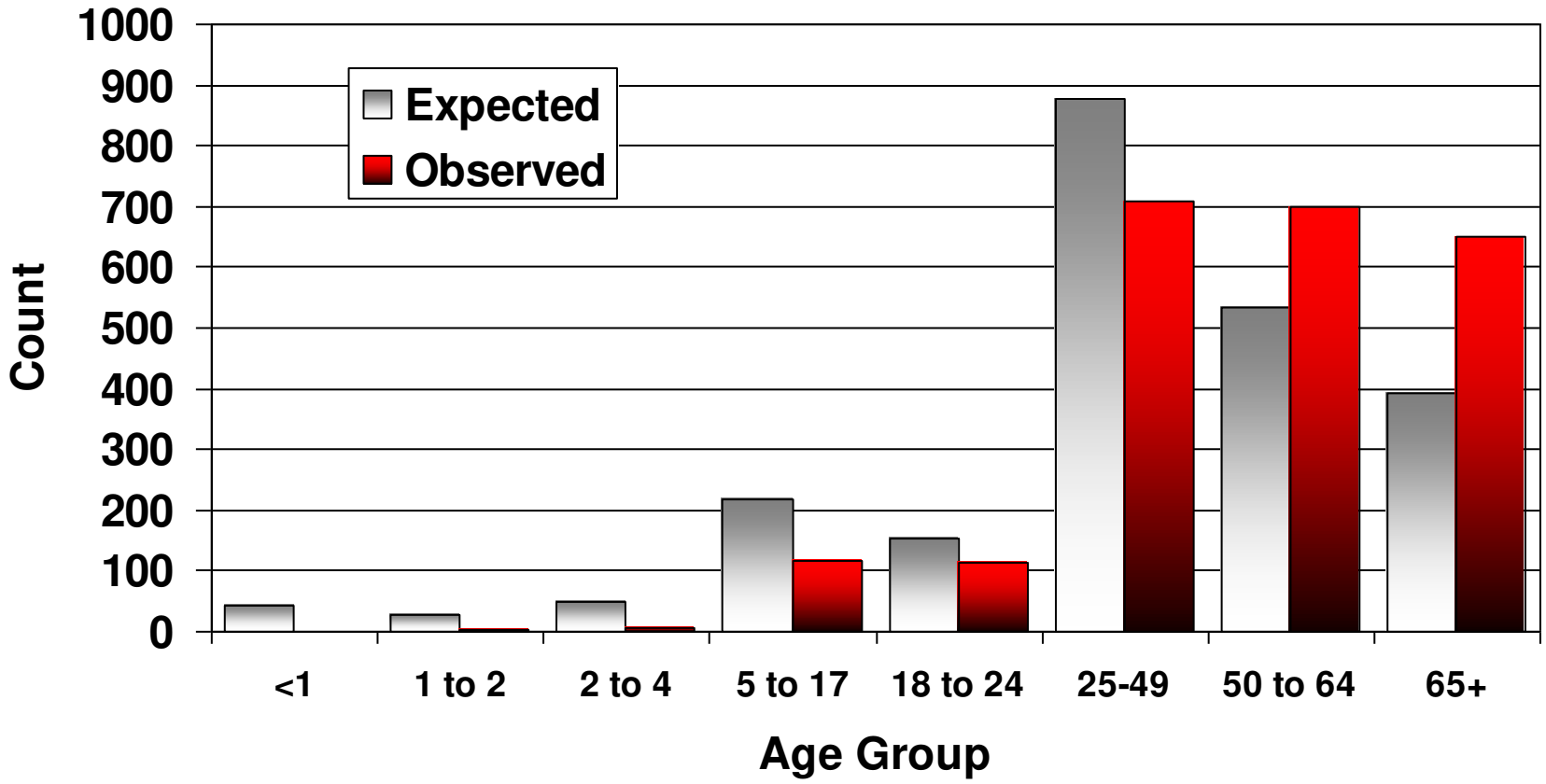
a visit to my own department

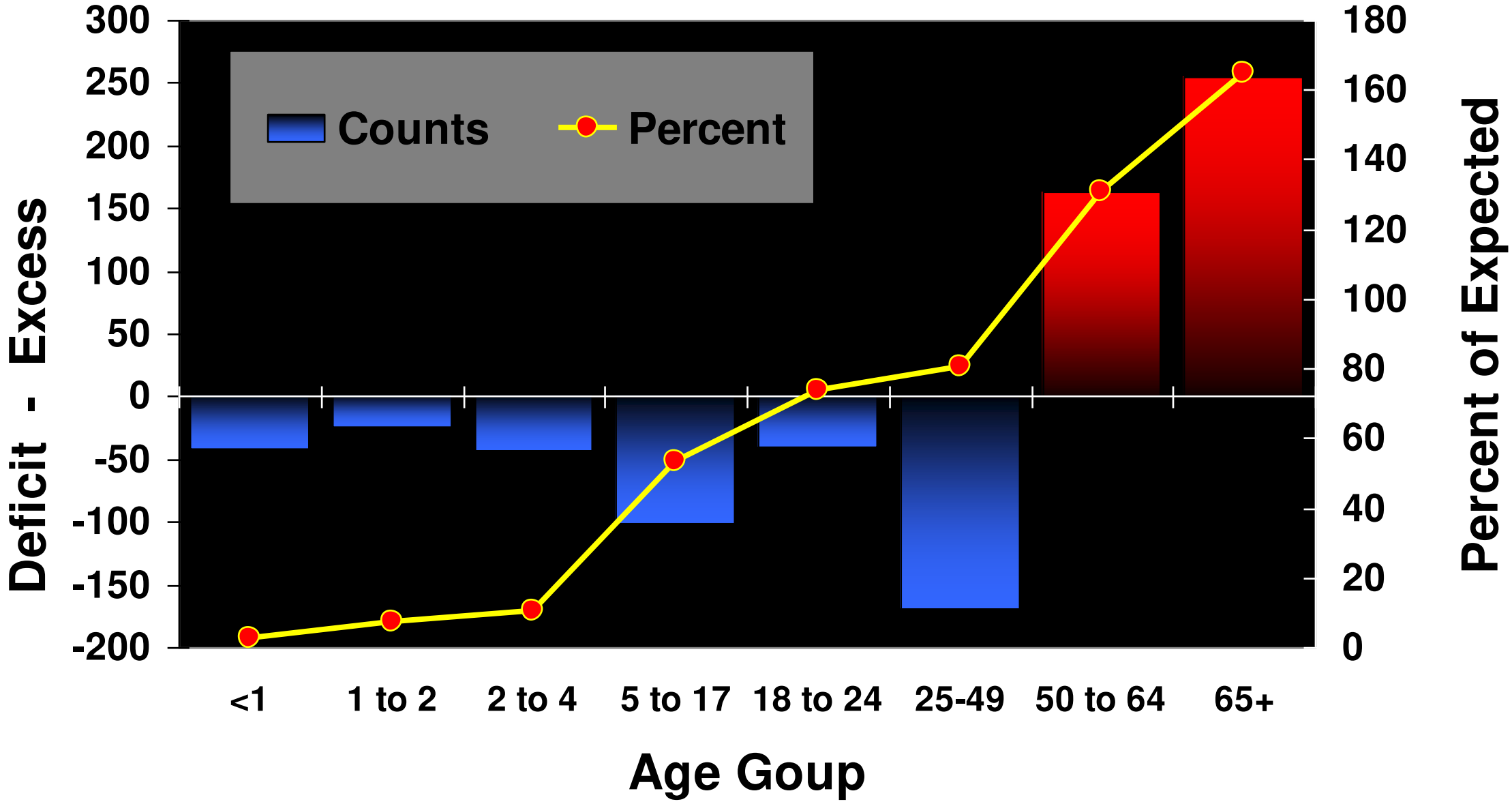
review of data on family medicine patients

Age and Sex of Shingles in Primary Care



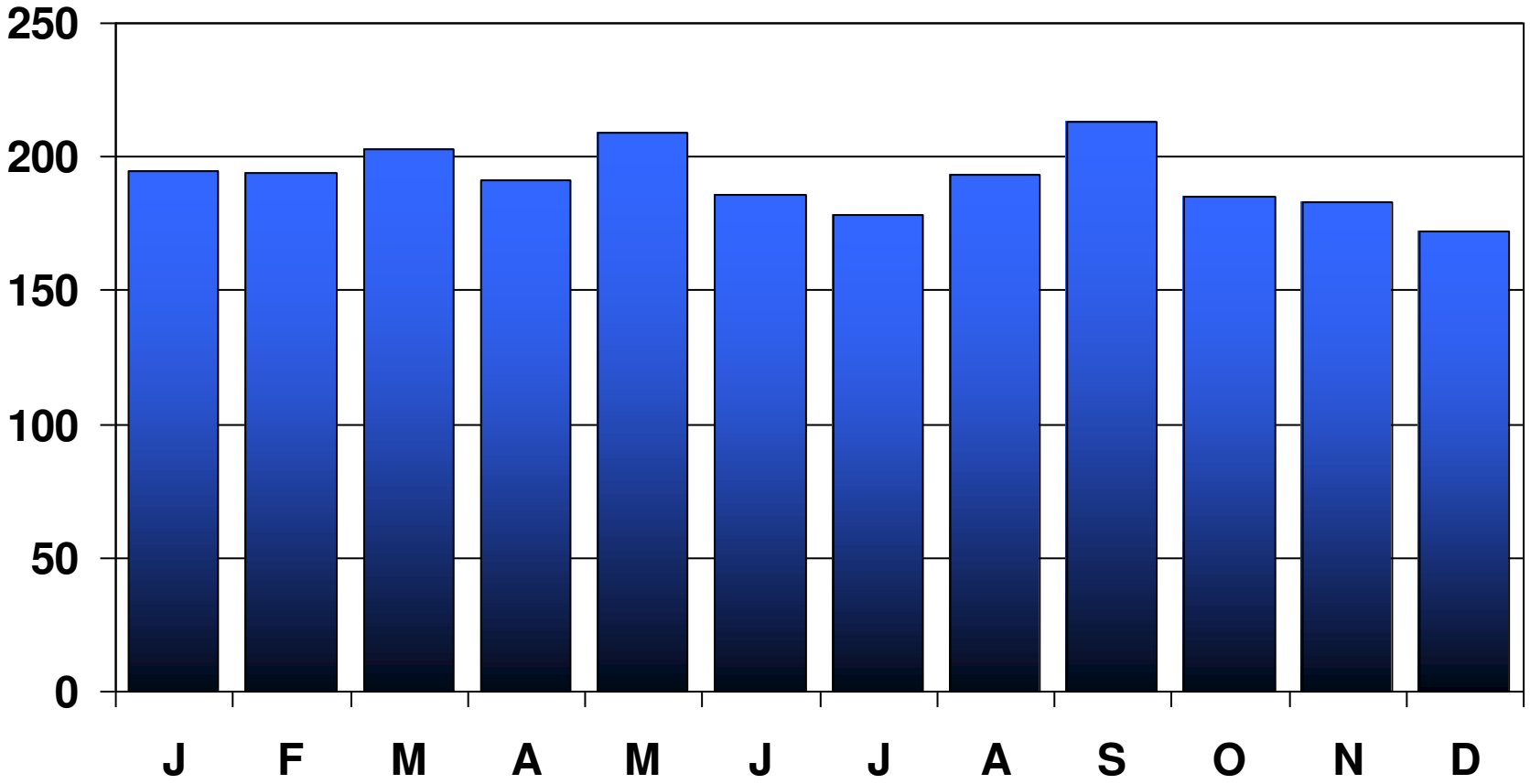
Actual cases compared to number expected across age groups




Counts
Percent
300
250
200
150
100
50
0
-50
-100
-150
-200
Deficit - Excess
180
160
140
120
100
80
60
40
20
0
Percent of Expected
<1
1 to 2
2 to 4
5 to 17
18 to 24
25-49
50 to 64
65+
Age Goup

Combined Monthly* Counts of Shingles Cases

(1 January 2007 to 31 December 2009)



* Each month adjusted to 30.44 days

Treatment of Shingles

- **Antiviral medicines**
  - Acyclovir
  - Valacyclovir
  - Famciclovir
- shorten the length and severity of the illness
- Most effective if started ASAP after the rash appear!
- <u>If you think you have shingles, contact your healthcare provider ASAP!</u>

- **Pain medicines** may help relieve the pain caused by shingles
  - over-the-counter
  - prescription from your doctor
- Itching may be relieved by:
  - Wet compresses
  - Calamine lotion
  - Colloidal oatmeal baths
    - a lukewarm bath mixed with ground up oatmeal

Prevention is the best approach

Vaccine Options

- Zostavax (ZVL) - no longer available
  - Live attenuated virus vaccine
  - Single sub-cutaneous dose

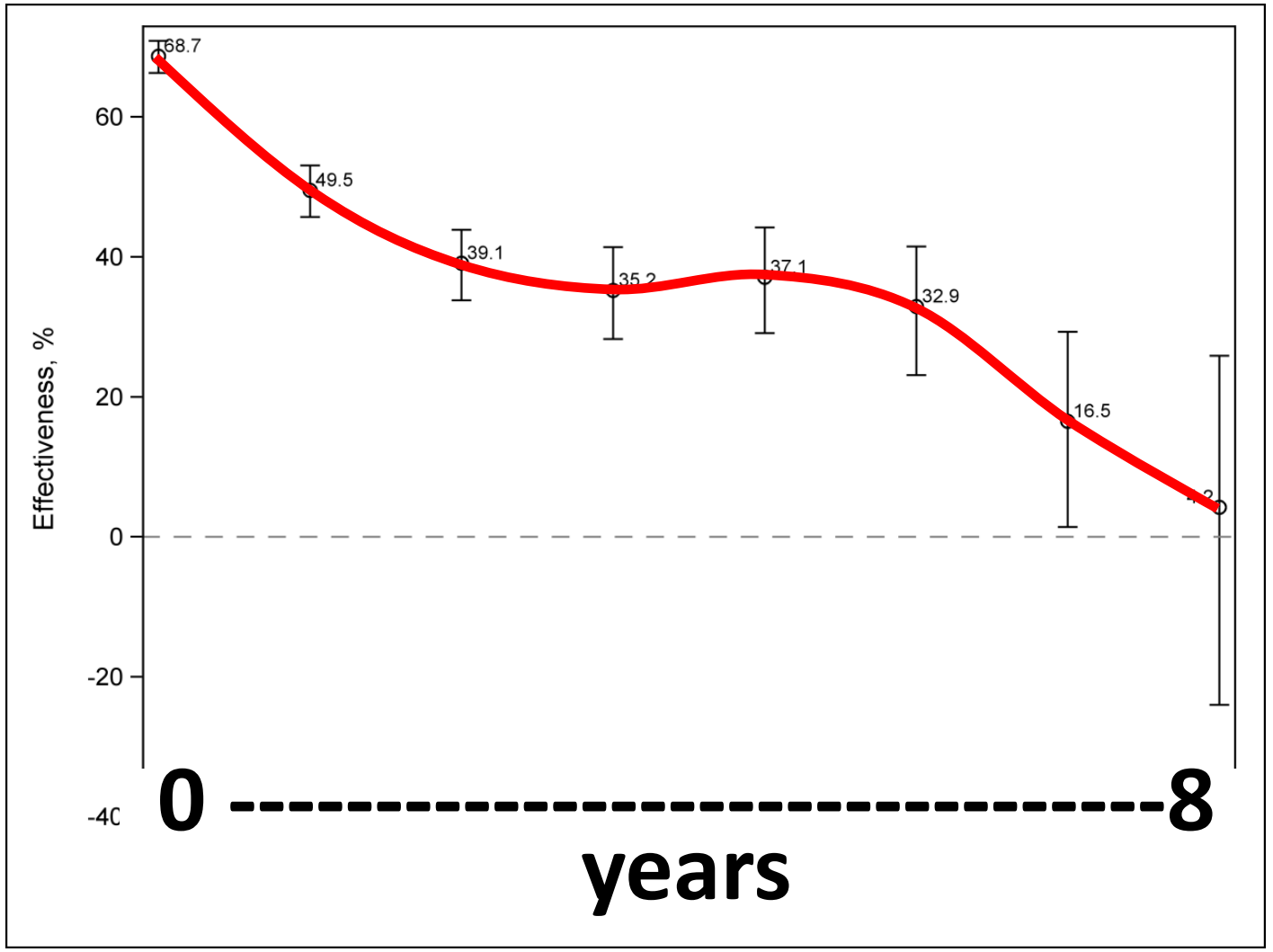
- Shingrix (RZV) – preferred vaccine
  - Recombinant zoster vaccine
  - 2-dose intramuscular series
    - Second dose give 2-6 months after the first

Advisory Committee on Immunization Practices (ACIP) Recommendations

- Shingrix is recommended for prevention of herpes zoster, post-herpetic neuralgia, and its complications for:
  - Immunocompetent adults ages 50 and older
  - Immunocompetent adults who previously got Zostavax
  - immunocompromised individuals age ≥ 19 years

- Shingrix is preferred over Zostavax
  - Efficacy estimates are significantly higher
  - Appears to wane at a slower rate over the first 4 years

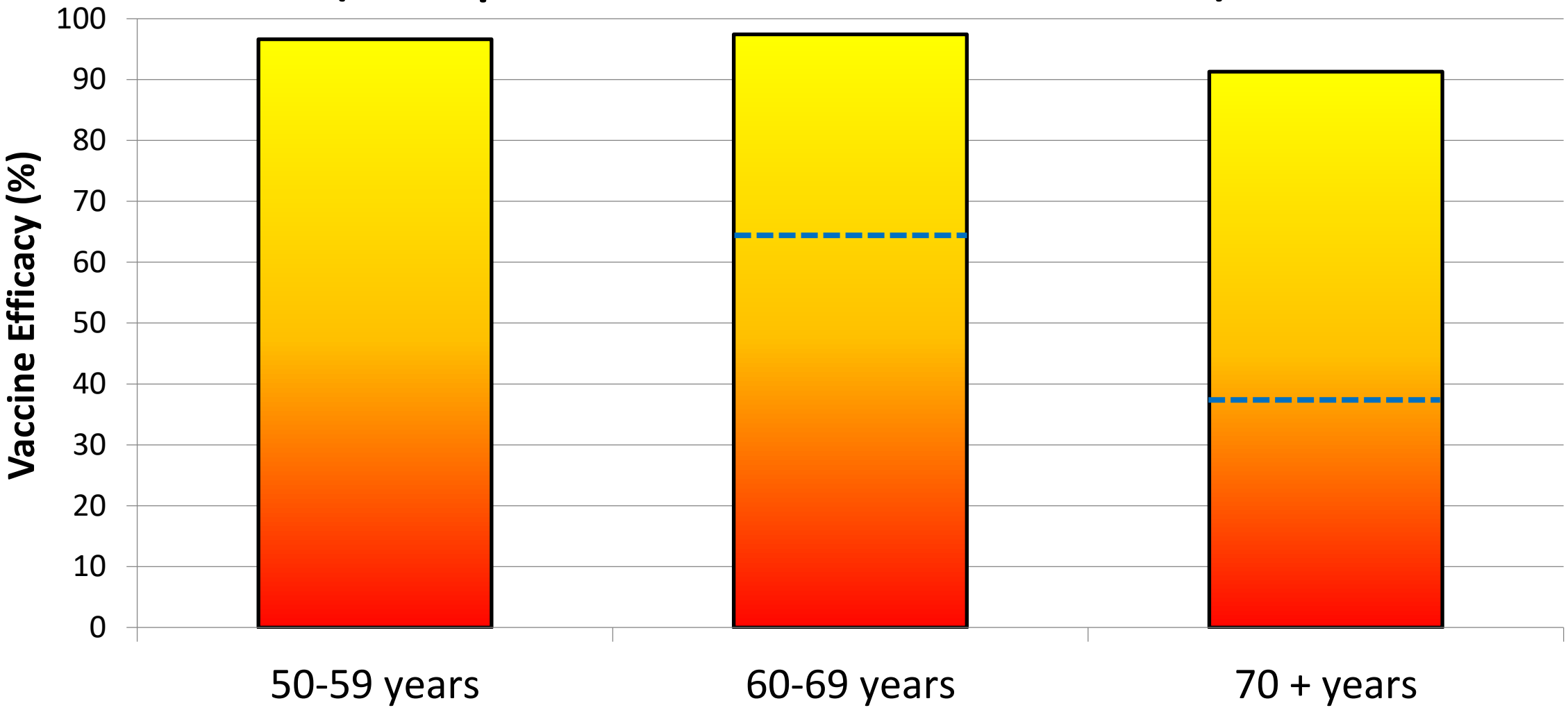
Benefit from Zostavax decreased over time



Tseng, HF, Harpaz R, Luo Y et al. Declining effectiveness of herpes zoster vaccine in adults 60 years and older. J Infect Dis. 2016.

Improved Immune Response to Shingrix

(compared to Zostavax - - - - -)



Side Effects from Vaccination

Zostavax

- Injection site reactions
- In rare instances
  - Disseminated rash
  - Herpes Zoster in immunocompetent patients
  - Life threatening and fatal complications in immune compromised patients

Shingrix

- Sore arm with mild or moderate pain
- Redness and swelling at site of injection
- 1 out of 6 experience side effects preventing them from doing regular activities: symptoms resolve on their own in 2-3 days
  - Side effects were more common in younger people
  - Patients might have a reaction to either or both doses

Insurance Coverage

- **Medicare**
  - Medicare Part D plans cover the shingles vaccine
    - May be a large cost to the patient, depending on the plan
    - May be a copay or the patient may need to pay in full and then get reimbursed
  - Has not be covered under Part B
- **Medicaid**
  - May or may not be covered, depending on plan
- **Private Insurance**
  - Shingrix is covered as part of the Affordable Care Act with no deductible

All ACIP-recommended vaccines for seniors will now be covered under Medicare Part B

Adults

Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2022

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV4) or **Influenza recombinant** (RIV4)	1 dose annually			
Influenza live, attenuated (LAIV4)	1 dose annually			
Tetanus, diphtheria, pertussis (Tdap or Td)	1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (see notes)			
	1 dose Tdap, then Td or Tdap booster every 10 years			
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)			
Varicella (VAR)	2 doses (if born in 1980 or later)		2 doses	
Zoster recombinant (RZV)	2 doses for immunocompromising conditions (see notes)		2 doses	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal (PCV15, PCV20, PPSV23)	1 dose PCV15 followed by PPSV23 OR 1 dose PCV20 (see notes)			1 dose PCV15 followed by PPSV23 OR 1 dose PCV20
Hepatitis A (HepA)	2 or 3 doses depending on vaccine			
Hepatitis B (HepB)	2, 3, or 4 doses depending on vaccine or condition			
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, see notes for booster recommendations			
Meningococcal B (MenB)	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations			
	19 through 23 years			
***Haemophilus influenzae* type b** (Hib)	1 or 3 doses depending on indication			

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection

Recommended vaccination for adults with an additional risk factor or another indication

Recommended vaccination based on shared clinical decision-making

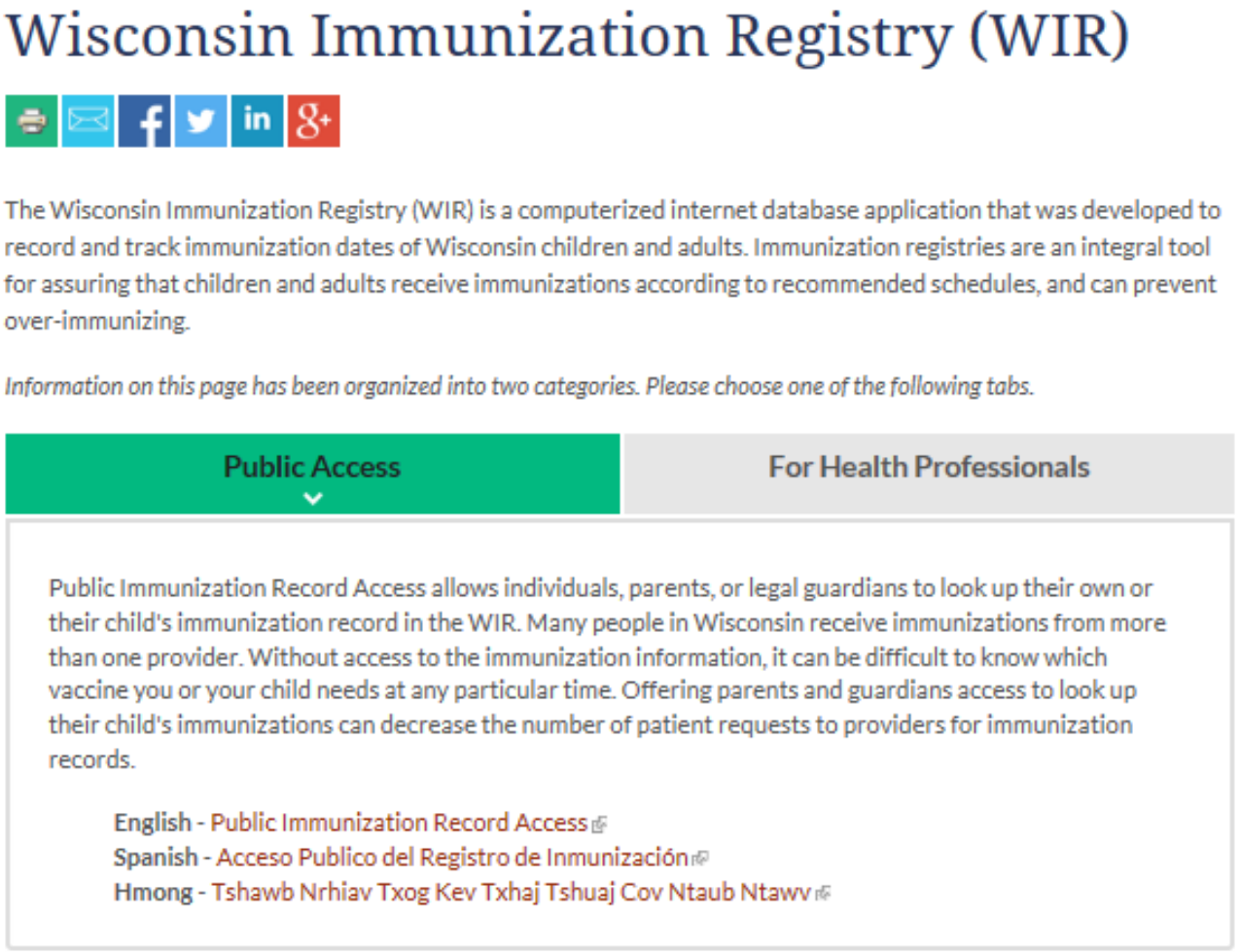
No recommendation/ Not applicable

Wisconsin's Gem

https://www.dhs.wisconsin.gov/immunization/wir.htm

Just Google: WIR

https://www.dhfswir.org/PR/logoff.do



Wisconsin Immunization Registry (WIR)

The Wisconsin Immunization Registry (WIR) is a computerized internet database application that was developed to record and track immunization dates of Wisconsin children and adults. Immunization registries are an integral tool for assuring that children and adults receive immunizations according to recommended schedules, and can prevent over-immunizing.

Information on this page has been organized into two categories. Please choose one of the following tabs.

Public Access | For Health Professionals

Public Immunization Record Access allows individuals, parents, or legal guardians to look up their own or their child's immunization record in the WIR. Many people in Wisconsin receive immunizations from more than one provider. Without access to the immunization information, it can be difficult to know which vaccine you or your child needs at any particular time. Offering parents and guardians access to look up their child's immunizations can decrease the number of patient requests to providers for immunization records.

English - Public Immunization Record Access
Spanish - Acceso Publico del Registro de Inmunización
Hmong - Tshawb Nrhiav Txog Kev Txhaj Tshuaj Cov Ntaub Ntawv

Immunizations: Wisconsin Immunization Registry

Wisconsin Immunization Registry (WIR) is an online database that tracks vaccine records for Wisconsin children and adults.

WIR is an important tool that:

- Helps ensure children and adults receive vaccines on time.
- Reduces the time and money it takes you to get old vaccine records.
- Gives you direct access to your vaccine records.
- Allows you to print vaccine records when needed for child care, school, or work.

We offer a brochure called Wisconsin Immunization Registry Information for Parents, P-42514 to help you learn more. This brochure is available in different languages.

You can access the WIR to look up your own immunization record. If you're a parent or legal guardian, you also can look up your children's records. Many people in Wisconsin receive vaccines from more than one provider. Public access to WIR allows you to find your vaccine record quickly and easily, from anywhere you have access to a computer or smart phone.

Look up a vaccine record on WIR

Wisconsin Immunization Registry

HOME | FORMS | RENEWAL/REGISTRATION | RELATED LINKS

Immunization Record Search

Families and individuals can use this screen to view and print their immunizations.
First Name, Last Name, and Birth Date are required.

Search
Home
Help

* First Name [ ] * Last Name [ ]

* Birth Date [ ] MM/DD/YYYY

Please supply either the Social Security Number, Medicaid ID, or Health Care Member ID:

* SSN [ ] - [ ] - [ ]

- or -

* Medicaid ID [ ]

- or -

* Health Care Member ID [ ]

Click one of the links below to see the Wisconsin Immunization Registry Parent Brochure:

- WIR Parent Brochure
- Folleto de WIR para Padres de Familia
- WIR Niam Thiab Txiv Phau Me Nyuam Ntawv

Vaccine History

History Print Return to Search

Vaccine Group	Vaccine	Date Administered	Series
COVID-19	Pfizer COVID-19 Vaccine	12/31/2020	1 of 3
	Pfizer COVID-19 Vaccine	01/21/2021	2 of 3
	Pfizer COVID-19 Vaccine	11/30/2021	3 of 3
	Pfizer BvlntBstr 12+	09/20/2022	

Vaccines Recommended

Vaccine	Immunization Status
COVID-19	Complete
HepA	Recommended Now
Influenza	Date Needed 08/01/2023
MMR	Recommended Now
Pertussis/Tdap	Complete
Td	Date Needed 12/06/2029
Varicella	Recommended Now
Zoster	Recommended Now

Vaccine Recommendations

Summary

- Shingles is common, painful, and risk increases with age
- If you suspect that you may have shingles, call your healthcare provider ASAP
  - early treatment can help
- Best approach is prevention with safe and effective vaccines
- Don’t forget
  - COVID-19 vaccines and boosters
  - Influenza vaccines
    - enhanced vaccines for individuals 65+ years

Contact Information

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