

INTRODUCTION

- Shingles (herpes zoster) results from reactivation of latent varicella zoster virus (VZV) in dorsal root and trigeminal nerve ganglia.
- Most commonly occurs in individuals over the age of 50 or in those with suppressed immune systems.
- Most common complication is postherpetic neuralgia (PHN). Others include herpes zoster oticus, herpes zoster ophthalmicus, and bacterial superinfection.
- A primary limitation of the live-attenuated vaccine Zostavax® is that its use is contraindicated in those most susceptible to Shingles and its complications – immunosuppressed individuals.
- Additionally, efficacy wanes considerably in the years following vaccination.
- The new non-live recombinant zoster vaccine (Shingrix®) has a similar safety profile between immunocompetent and immunocompromised patients.
- The Shingrix® vaccine has been shown to have significantly higher efficacy than the Zostavax® vaccine.
- 65.5% of adults ≥60 years of age remain unvaccinated in the U.S., with rates being 9.3% below the national average in Louisiana.
- The purpose of this study is to determine if educational patient surveys on Shingles, its complications, and its prevention can increase Shingrix® vaccination rates among patients of the Louisiana State University ophthalmology clinic.

HYPOTHESIS

Providing educational patient surveys on shingles, its complications, and its prevention will increase Shingrix® vaccination rates among patients of the LSU ophthalmology clinic who are ≥50 years of age.

METHODS

- A brief educational patient survey was conducted by all patients while in the waiting room prior to their ophthalmology visits
- Data collected included patient age and current vaccination status (Figure 2)
- Educational portion of survey was designed to reduce medical jargon and include basic information on Shingles, the Shingrix® vaccine, and CDC recommendations (Figure 1)
- Final survey question assessed interest in receiving the Shingrix® vaccine, and when
- Upon return to clinic, patients repeat the survey; previous responses are compared to current responses to determine if patient has received the Shingrix® vaccine
- The independent variable is the administration of educational patient surveys on Shingles, the Shingrix® vaccine, and CDC recommendations
- The dependent variable is patient vaccination with Shingrix®

What is Shingles?

- Shingles is a painful rash that is caused by the same virus that causes chickenpox
- Anyone who has had chickenpox may develop Shingles later in life
- Even after the rash goes away, painful burning and tingling remains in the area (postherpetic neuralgia)
- Shingles that occurs near the eye may result in permanent blindness (herpes zoster ophthalmicus)
- Shingles that occurs in the ears may cause hearing loss (herpes zoster oticus)

What is Shingrix?

- The Shingrix vaccine is more than 90% effective at preventing shingles and the complications of the disease
- Two doses of the vaccine are required, separated by 2-6 months

Who needs the vaccine?

- Everyone ≥ 50 yrs of age
- Should I get the Shingrix vaccine if I don't think I've ever had chickenpox? **Yes**
 - More than 99% of Americans ages 40 or older have had chickenpox, even if they don't remember getting the disease
- Should I get the Shingrix vaccine if I've already had the Zostavax vaccine? **Yes**
 - Shingrix is the CDC-recommended vaccine due to better prevention against Shingles than with the Zostavax vaccine
- Should I get the Shingrix vaccine if I've already had shingles? **Yes**
 - Yes, the Shingrix vaccine can help prevent recurrences of the disease

Figure 1: Educational portion of patient survey

	Number of Patients
No	1074 (73%)
Yes, but unsure which one or how many	221 (15%)
Yes, Zostavax	65 (4%)
Yes, 2 doses of Shingrix	115 (8%)

Figure 2: Have you been vaccinated for Shingles?

	Number of patients
No	695 (59%)
Yes	422 (36%)
Unsure	62 (5%)

Figure 3: Now, after reading this information, are you planning on having the vaccine?

RESULTS

- Data collection is still in progress
- 1475 data points (i.e. the survey has been completed 1475 times)
- 92% of patients surveyed either had not been vaccinated with Shingrix® or were unsure of their vaccination status
- 36% of patients that completed the survey expressed plans to receive the vaccine
- The survey has been given to the same patient upon their return to clinic 34 times; 3 of these “repeat” patients had gotten the Shingrix® vaccine

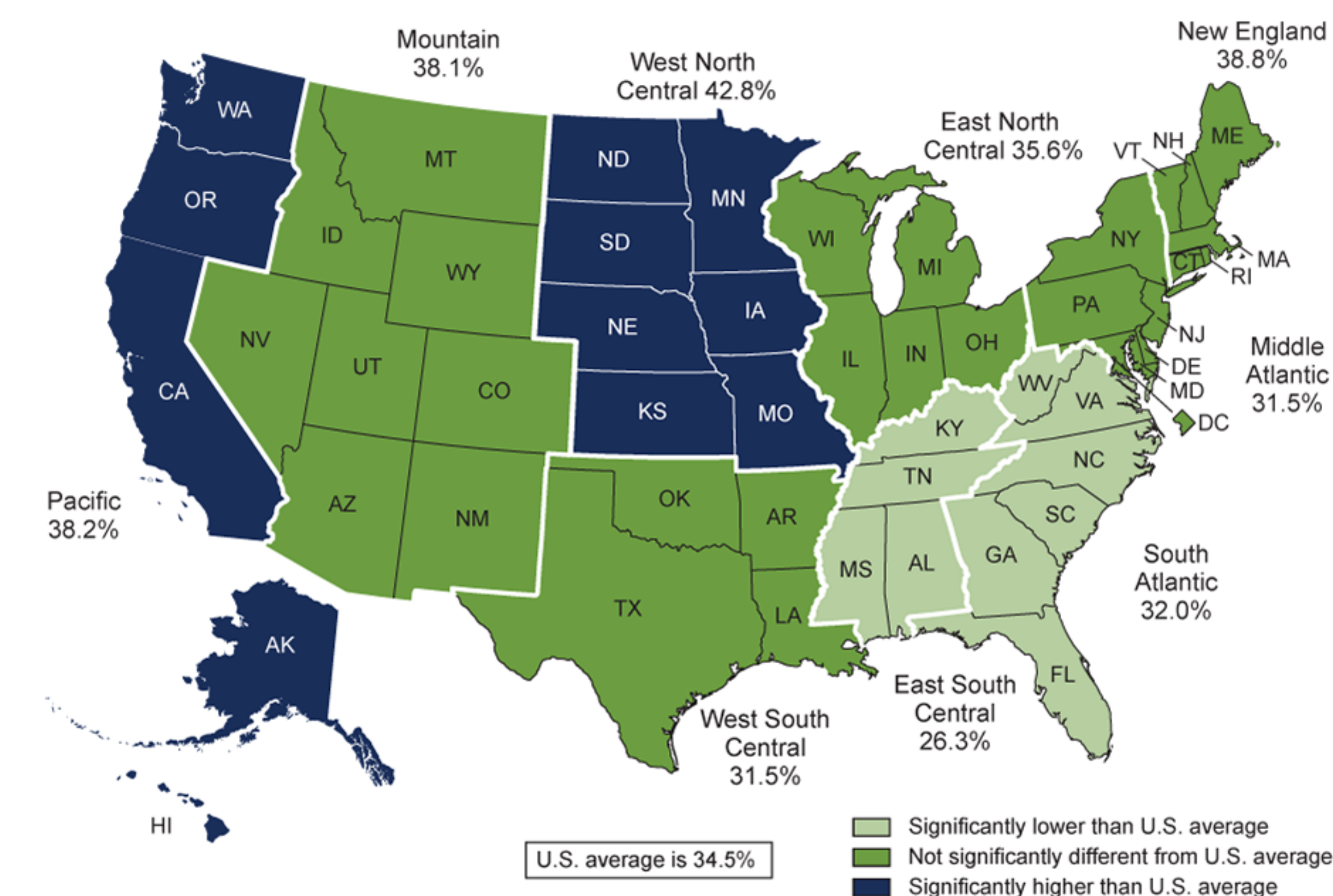


Figure 4: Percentage of adults aged 60 or over who had ever received a shingles vaccine, 2018

DISCUSSION

- In 2014, a study investigating factors associated with HZ vaccination status revealed that 27.1% of participants stated that they did not know the vaccine was needed
- A 1999 randomized controlled trial showed that the use of a low-literacy patient education tool made patients 5 times more likely to receive the pneumococcal vaccine.
- Through the use of the educational patient survey on Shingles, its complications, and its prevention, this study is designed to determine if patient education can increase Shingrix® vaccination rates among patients of the Louisiana State University ophthalmology clinic.
- Potential limitations of this study include the inability to directly assess whether knowledge gained from the patient survey was the reason why patients who got vaccinated did so
- Additionally, the quality of results of this study is dependent on the accuracy of patient responses, which were not cross-checked with patient records.
- Given the severity of potential Shingles complications, the efficacy of the Shingrix® vaccine, and inadequate vaccination rates, it is of paramount importance that clinicians promote vaccinations for individuals ≥ 50 years of age