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VACCINE ASSESSMENT OF MEALS-ON-WHEELS RECIPIENTS

Background

- In 2007, a subcommittee of the Utah Adult Immunization Coalition (UAIC) was formed to promote zoster and pneumococcal (PPV) vaccines
- Survey was adapted from an influenza immunization survey of Meals-on-Wheels recipients already being conducted annually in one district
- Original survey was expanded to include zoster and pneumococcal vaccines



Objectives

- To determine vaccination coverage levels of Utah's Meals-on-Wheels population for influenza, pneumococcal and zoster vaccines
- To provide vaccine information to a homebound population that is mostly elderly, low income and likely to have high-risk health conditions
- To assess vaccination barriers
- To improve access to vaccination



2008 Survey and Vaccine Information Sheet

The Pneumonia Immunization Survey

In order to help raise the health of the population at high risk for complications of the flu and pneumonia, the Utah Adult Immunization Coalition is conducting a survey. PLEASE ANSWER THE FOLLOWING QUESTIONS.

- Did you receive a flu shot during the flu season last year? Yes ___ No ___
- Do you plan to get a flu shot this flu season? Yes ___ No ___
- If you did get a flu shot last flu season, how did you receive it? (Please circle only one answer below)
 - A. A nurse from a Home Health Agency gave me a flu shot at my home.
 - B. The "Walk", a friend, or a family member took me to a flu clinic at a grocery store, senior center, health department, or other public place.
 - C. The "Walk", a friend, or a family member took me to a "Drive-by" flu clinic. ("Drive-by" means you got a flu shot without getting out of the car.)
 - D. The "Walk", a friend, or a family member took me to my doctor for my flu shot.
 - E. Other (please explain): _____
- Have you ever received a pneumonia shot? Yes ___ No ___ Don't know ___
- Have you ever received a zoster (shingles) vaccine? Yes ___ No ___
- If you have not had a pneumonia or zoster shot, would you like to get one? Yes ___ No ___
- There is more information about the pneumonia and zoster vaccines on the other side of the survey.

PLEASE HELP BY FILLING A SET AND/OR OTHER SETS THIS YEAR. If you would like help getting your flu shot this year, please give us your name and address.

Name: _____ Phone: _____
Address: _____ City: _____ ZIP: _____

Thank you for taking the time to complete this survey. Unfortunately, please return it to your Meals-on-Wheels district.

Pneumonia Vaccine

The pneumococcal (PPV) shot. The Centers for Disease Control and Prevention (CDC) and the Advisory Committee on Immunization Practices (ACIP) recommend one dose of pneumonia vaccine to all adults age 65 and older.

- The pneumonia vaccine prevents 23 different types of pneumonia.
- Pneumonia is a common complication from the flu.
- An estimated 17,000 pneumonia hospitalizations occur each year in the U.S.
- The pneumonia cause fatality 7% to 7%, but is higher for elderly adults.

The pneumonia vaccine is covered by Medicare Part B or under private insurance plans for all adults aged 65 and older.

Zoster Vaccine

The Shingles Vaccine

The CDC and the ACIP recommend one dose of zoster vaccine for all adults age 60 and older.*

- Anyone who has had shingles is at risk for shingles. Shingles is a painful disease marked by a blistering rash that is caused by the reactivation of the chickenpox virus.
- According to CDC, 95% of all adults are at risk of getting shingles.
- Researchers have found that, overall, in adults aged 60 years and older, the vaccine reduced the occurrence of shingles by about 50%. For adults ages 65-69, it reduced occurrence of shingles by 64%.

Zoster vaccine is covered under most Medicare Part D prescription drug benefit plans and many private insurance plans. However, individual coverage and reimbursement for these plans vary. The reimbursement for some plans is subject to copays, coinsurance and/or deductibles. If you are 60 or older, we encourage you to contact your insurance provider to find out what your coverage is for the zoster vaccine.

*People with severe allergy to a vaccine component, with immune suppression, or with HIV infection should not get zoster vaccine.

Survey Methods

- Surveys were distributed and picked up through the Meals-on-Wheels delivery system
- Aging Service directors throughout Utah were contacted by letter and follow-up calls and asked to participate
- Regional immunization program coordinators were asked to participate in follow-up vaccination using contact information provided on surveys



Survey Methods

- Survey numbers for printing were determined by the number of Meals-on-Wheels recipients in participating districts
- Types of surveys printed were determined by whether or not vaccination follow-up would be done
- Districts were asked to conduct the survey at the start of flu season as a reminder and an aid to obtaining influenza vaccination



Survey Methods

- Surveys and vaccine information sheets were printed and mailed to each participating district
- Survey instruction letters and pre-addressed return envelopes were included with surveys distributed to Aging Services
- Instructions and pre-addressed envelopes were also sent to participating regional immunization coordinators



Survey Methods

- Completed surveys were mailed back to state immunization program or forwarded on to participating regional immunization coordinators for vaccination follow-up
- Regional immunization coordinators were to mail remaining surveys back to state once follow-up was done
- Access database with a survey entry form was developed to expedite input and calculation of data



2008 Survey Follow-up

- In 2009, survey analysis was done and report was printed and distributed to:
 - ▣ All regional Aging Services Directors
 - ▣ All Utah health district immunization program coordinators and nursing directors
 - ▣ UAIC membership
- Report was also posted on Utah Immunization Program website at: <http://www.immunize-utah.org/public/Meals%20on%20Wheels%20Survey.html>



Zoster Intervention (between surveys)

- Early in 2010, zoster pilot project using ARRA 317 funding was designed and conducted in two districts
- Zoster vaccine was offered at no cost to uninsured adults with a maximum allowable \$20 administration fee – later project was expanded to include under-insured adults
- A total of 2,500 zoster vaccine doses were distributed in April, 2010 to one urban and one rural district



Zoster Intervention

- 2,100 zoster doses were distributed in the urban district to:
 - ▣ 3 senior clinics (150 doses each)
 - ▣ 17 pharmacies (approximately 97 doses each)
- 400 doses were distributed in the rural district to:
 - ▣ 3 district public immunization clinics (250 doses total)
 - ▣ 1 pharmacy (150 doses)
- Flyers were distributed to Meals-on-Wheels recipients in pilot project districts



2010 Survey Changes

- Meals-on-Wheels survey was revised early in 2010 for distribution in the fall:
 - ▣ Vaccination location check-box options were condensed, reordered and new location options were added
 - ▣ Question asking if respondent wanted to get a zoster or pneumococcal vaccination was separated into two questions and the option of answering "Don't know" was added
- Vaccine information sheet was also revised



Revised 2010 Surveys (with/without contact box)



UAIC
Urbanshelter Adult Immunization Coalition
Vaccination Survey

To help determine the needs of populations at high-risk for complications of the flu and pneumonia, the UAIC is requesting that Meals-on-Wheels recipients complete this survey.

PLEASE ANSWER THE FOLLOWING QUESTIONS:

1. Do you plan to get a flu vaccination this flu season? Yes No
2. Did you receive a flu vaccination during the flu season last year? Yes No
3. Where did you receive your last flu vaccination?
(Please check the applicable answer below)
 - A home health agency nurse vaccinated me at my home
 - Doctor's Office
 - Local health department
 - Drive-by clinic
 - Other (please explain): _____
4. Have you ever received a pneumococcal vaccination? Yes No Don't know
- If not, would you like to get a pneumococcal vaccination? Yes No
5. Have you ever received a shingles (zoster) vaccination? Yes No Don't know
- If not, would you like to get a shingles (zoster) vaccination? Yes No Don't know
6. Do you need help getting your vaccinations? Yes No

If you need help getting your flu shot this year, please provide your name and address:
 Name: _____ Phone: _____
 Address: _____ City: _____ ZIP: _____

*Information about the shingles and pneumococcal vaccines is on the attached sheet.
 Thank you for taking the time to complete this survey.
 Tomorrow, please return it to your Meals-on-Wheels office.



UAIC
Urbanshelter Adult Immunization Coalition
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1. Do you plan to get a flu vaccination this flu season? Yes No
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3. Where did you receive your last flu vaccination?
(Please check the applicable answer below)
 - A home health agency nurse vaccinated me at my home
 - Doctor's Office
 - Local health department
 - Drive-by clinic
 - Other (please explain): _____
4. Have you ever received a pneumococcal vaccination? Yes No Don't know
- If not, would you like to get a pneumococcal vaccination? Yes No
5. Have you ever received a shingles (zoster) vaccination? Yes No Don't know
- If not, would you like to get a shingles (zoster) vaccination? Yes No Don't know
6. Do you need help getting your vaccinations? Yes No

For more information about where to receive your flu shot or other vaccines you may call the Flu Vaccine Locator at: 1-800-275-8689

*Information about the shingles and pneumococcal vaccines is on the attached sheet.
 Thank you for taking the time to complete this survey.
 Tomorrow, please return it to your Meals-on-Wheels office.

Revised 2010 Vaccine Information Sheet



UAIC
Urbanshelter Adult Immunization Coalition

Vaccination Information
(Please separate this sheet from the survey and keep it for future reference)

The pneumococcal and shingles vaccinations may be available through:

- doctors' offices
- pharmacies
- health departments
- home health agencies
- community health clinics
- nursing services

It is best that you call ahead to the facility you would like to visit and ask if they have the vaccines you wish to receive. Also, many offices, clinics, pharmacies and other agencies prefer that you make an appointment.

For more information about vaccines or information about where to receive your vaccinations you may call the Flu Vaccine Locator at: 1-800-275-8689

You can also use the internet to find a flu vaccination site near you. The website for the Flu Vaccine Locator is at: www.uaicinc.org

Pneumococcal Vaccine
(Pneumococcal polysaccharide vaccine (PPV))

The Centers for Disease Control and Prevention (CDC) and the Advisory Committee on Immunization Practices (ACIP) recommend one dose of pneumococcal vaccine to all adults age 65 and older.

- The pneumococcal vaccine prevents 23 different types of pneumonia.
- Pneumonia is a common complication from the flu.
- An estimated 175,000 pneumococcal hospitalizations occur each year in the U.S.
- The pneumococcal fatality rate is 1% to 7%, but is higher for elderly adults.

The pneumococcal vaccine is covered by Medicare Part B and by most private insurance plans for adults aged 65 and older.

Shingles Vaccine
(Zoster vaccine)

The CDC and the ACIP recommend one dose of zoster vaccine for all adults age 60 and older.*

- Anyone who has had shingles is at risk for shingles. Shingles is a painful disease marked by a blistering rash that is caused by the reactivation of the chickenpox virus.
- According to CDC, 95% of all adults are at risk of getting shingles.
- Researchers have found that, overall, in adults aged 60 years and above, the vaccine reduced the occurrence of shingles by about 50%. For adults ages 65-69, it reduced the occurrence of shingles by 64%.

Shingles (zoster) vaccine is covered by most Medicare Part D prescription drug benefit plans and by many private insurance plans. The reimbursement for some plans is subject to co-pay, co-insurance and/or deductibles. If you are 60 or older, we encourage you to contact your insurance company to find out what your coverage is for the shingles vaccine.

*People with severe allergy to a vaccine component with immune suppression, or with HIV infection should not get the shingles vaccine.

Survey Results

- Number of districts participating in survey increased
 - 8 out of 12 in 2008
 - 12 out of 12 in 2010
- Number of districts doing follow-up vaccinations increased
 - 4 out of 8 in 2008
 - 9 out of 12 in 2010



Survey Results

- Number of surveys completed and returned increased
 - 1,120 surveys out of approximately 4,700 (24%) in 2008
 - 1,788 surveys out of approximately 5,671 (32%) in 2010
- Interest in/or receipt of vaccination varied by vaccine and seemed related to vaccine knowledge: on pneumococcal and zoster questions respondents more frequently answered "Don't know" or left questions blank



Survey Results

- Meals-on-Wheels respondents indicating receipt of influenza vaccination decreased
 - 82% for 2007/2008 flu season
 - 76% for 2009/2010 flu season
- Number of respondents planning to get an influenza vaccination during upcoming season decreased
 - 80% for the 2008/2009 flu season
 - 79% for the 2010/2011 flu season



Survey Results

- Respondents who had ever received a pneumococcal (PPV) vaccination decreased
 - 72% in 2008
 - 68% in 2010
- In 2010, 30% of respondents without pneumococcal vaccination wanted to get one (in 2008, question was combined with zoster)



Survey Results

- Respondents who had received a zoster vaccination increased
 - 7% in 2008
 - 9% in 2010
- In 2010, 29% of respondents without a zoster vaccination wanted to get one (in 2008, question was combined with pneumococcal)
- In 2010, 3% of respondents not wanting zoster vaccine commented that having had shingles was the reason



Survey Results

- 2008 survey established a baseline zoster vaccination coverage rate for Utah, which was increased by 2% statewide by 2010
 - Zoster rate almost doubled in urban district where zoster pilot project was conducted (6% in 2008 to 11% in 2010)
 - Zoster rate more than tripled in rural district where pilot project was conducted (4% in 2008 to 13% in 2010)



Survey Results

- Locations of last influenza vaccination:
 - Home health nurse (18% in 2008 / 15% in 2010)
 - Doctor's office (36% in 2008 / 50% in 2010)
 - Store pharmacy (N/A in 2008 / 17% in 2010)
 - Local health dept (N/A in 2008 / 12% in 2010)
 - Drive-by clinic (3% in 2008 / 3% in 2010)
 - Other (25% in 2008 / 17% in 2010)



Survey Results

- Common write-in answers on the "Other" choice for location of last flu vaccination (2010 survey):
 - Clinics conducted at Senior Centers (30%)
 - V.A. Facilities (16%)
 - Hospitals (14%)



Survey Results

- In 2010, 1% of respondents indicated an allergy or contraindication to vaccination
- In 2010, 134 respondents (7%) answered "No" on all questions, and 24 of those respondents (1%) wrote negative vaccine comments such as:
 - "Don't receive flu shots!"
 - "Nowhere. Don't want one."
 - "Never" (written on 5 different questions)
 - "Not getting them."
 - "Don't believe in shots."



Survey Results

- Respondents needing help obtaining vaccinations decreased
 - 25% in 2008
 - 18% in 2010
- Respondents including contact information increased
 - 7% in 2008
 - 11% in 2010



Survey Comparison Data

Influenza Vaccination Coverage Comparison

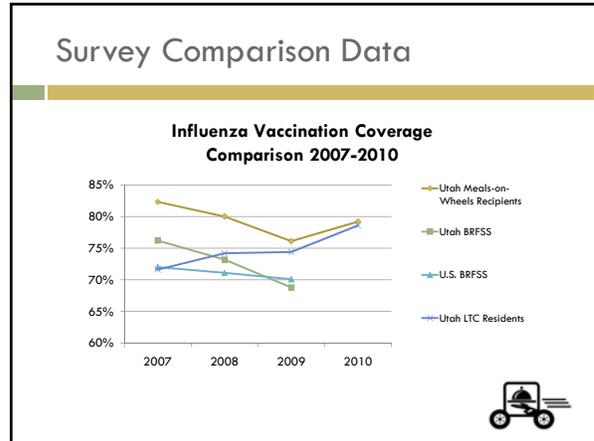
| Year | U.S. BRFSS ¹ for Flu | Utah BRFSS ¹ for Flu | Utah LTC Rate ² for Flu | Utah Meals-on-Wheels Rate for Flu |
|------|---------------------------------|---------------------------------|------------------------------------|-----------------------------------|
| 2007 | 72.0% | 76.2% | 71.6% | 82.3% ³ |
| 2008 | 71.1% | 73.3% | 74.2% | 80.0% ³ |
| 2009 | 70.1% | 68.8% | 74.4% | 76.1% ³ |
| 2010 | N/A | N/A | 78.6% ⁴ | 79.2% ³ |

¹ Behavioral Risk Factor Surveillance Survey rate: the percentage of surveyed non-institutionalized persons aged 65 years and older who have received vaccination.

² Long Term Care Facility rate: the percentage of residents/occupants of nursing homes, assisted living facilities, small care facilities, facilities for the mentally retarded and hospital swing beds who have received vaccination.

³ The Meals-on-Wheels survey used the term 'flu season' rather than a specific calendar year in its questions. Consequently, the survey theoretically spans the entire 2007/2008 flu season and go until the end of February of the 2008/2009 season, when the survey was completed. Because most high risk individuals are vaccinated early each flu season, the survey results are compared to the calendar year in which most vaccinations would have occurred.

⁴ The Utah Long Term Care Facility rate for 2010 is still a preliminary rate with 280 out of 291 reports completed.



Survey Comparison Data

Pneumococcal Vaccination (PPV) Coverage Comparison

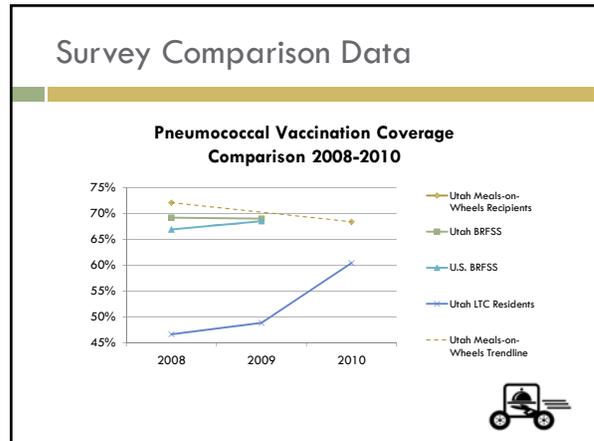
| Year | U.S. BRFSS ¹ for PPV | Utah BRFSS ¹ for PPV | Utah LTC Rate ² for PPV | Utah Meals-on-Wheels Rate for PPV |
|------|---------------------------------|---------------------------------|------------------------------------|-----------------------------------|
| 2008 | 66.9% | 69.2% | 46.6% | 72.0% ³ |
| 2009 | 68.5% | 69.0% | 48.8% | N/A |
| 2010 | N/A | N/A | 61.2% ⁴ | 68.4% ³ |

¹ Behavioral Risk Factor Surveillance Survey rate: the percentage of surveyed non-institutionalized persons aged 65 years and older who have received vaccination.

² Long Term Care Facility rate: the percentage of residents/occupants of nursing homes, assisted living facilities, small care facilities, facilities for the mentally retarded and hospital swing beds who have received vaccination.

³ The Meals-on-Wheels survey assesses the vaccination status as of the survey date. For the 2008 survey, most surveys were completed in October of 2008, with the exception of one district that deferred their survey until January, 2009. For the 2010 survey, most surveys were completed in October, however, one district deferred their survey until November, 2010, another deferred their survey until January, 2011, and a third district did not conduct their survey until February, 2011. For purposes of comparison the survey results are dated by the calendar year in which most vaccination information was received.

⁴ The Utah Long Term Care Facility rate for 2010 is still a preliminary rate with 280 out of 291 reports completed.



Survey Comparison Data

Utah Meals-on-Wheels Zoster Vaccination Coverage Comparison

| Year | Utah Statewide Meals-on-Wheels Rate for Zoster |
|------|--|
| 2008 | 6.6% ¹ |
| 2010 | 8.6% ¹ |

¹ The Meals-on-Wheels survey assesses the vaccination status as of the survey date. For the 2008 survey, most surveys were completed in October of 2008, with the exception of one district that deferred their survey until January, 2009. For the 2010 survey, most surveys were completed in October, however, one district deferred their survey until November, 2010, another deferred their survey until January, 2011, and a third district did not conduct their survey until February, 2011. For purposes of comparison the survey results are dated by the calendar year in which most vaccination information was received.

Survey Project Conclusions

- Influenza vaccination rates for Utah Meals-on-Wheels recipients are higher than rates for Utah BRFSS and LTC residents
- Pneumococcal vaccination rates for Utah Meals-on-Wheels recipients are equal to or higher than Utah BRFSS rates and much higher than Utah LTC resident rates
- Zoster vaccination rate is low but increasing, and targeted interventions can boost the rate faster

Survey Project Challenges

- Refining survey questions
- Obtaining statewide participation of Aging Services directors and immunization coordinators
- Logistics and timing of delivering survey materials to districts, and insuring all completed surveys were returned to the state
- Vaccination follow-up
 - Urban districts have more difficulty with vaccination follow-up due to limited staff and larger volume of Meals-on-Wheels recipients



Survey Project Successes

- Little cost outlay (printing survey materials and postage costs only)
- Survey design has been refined
- Vaccination awareness and access for Meals-on-Wheels recipients was improved
- Vaccination rates for a high-risk group of homebound elderly adults were established
- A measure for zoster vaccination coverage in Utah was established



Questions/Comments?

Thank you!

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