

Cape May County Influenza Vaccination Activities 2010-2011

Program Summary

For the 2010-11 influenza season, the Cape May County Department of Health ordered 5,700 doses of FluZone seasonal flu vaccine from Sanofi-Pasteur (435 multi-dose vials, 1,000 single-dose preservative-free vials, and 350 preservative-free pre-filled syringes). The first seasonal flu vaccine shipment was received on August 18, 2010 and all vaccine received by October 13, 2010. In addition, a new initiative was started with VaxCare, in which the Department administers vaccine to patients with Medicare Part B on behalf of VaxCare, earning a \$7.50 administration fee for each vaccine given and successfully billed. Through participating in the VaxCare program, the Department was able to offer seniors the new high-dose vaccine, in addition to the standard dose vaccine. 4,500 doses of vaccine were ordered (2,000 high-dose, 2,500 standard dose); 4,080 doses were returned unused, at no cost, to VaxCare at the end of the season.

The Department of Health organized one mass vaccination drive-through clinic on October 17, 2010 with a total of 2,966 people receiving their flu vaccine at this clinic. One clinic was held at the Department of Health targeting children less than 18 years and their parents on November 3, 2010, at which 319 residents (181 children and 138 family members) were vaccinated. Special senior clinics were held for the VaxCare program on October 5, October 7, October 21, and October 26 (546 persons vaccinated). Residents who did not have Medicare Part B as their primary payor were offered a free flu shot out of the County's vaccine order. At the end of the influenza season, a total of 5,978 influenza vaccinations had been given to County residents, representing all 16 municipalities, with 5,248 vaccinations provided directly by the Department of Health.

In 2010-11, the Advisory Committee on Immunization Practices (ACIP) recommended universal influenza vaccination for all persons 6 months of age and older. Out of the 5,248 vaccines administered, 77% were given to ACIP "high-priority" groups. Sixty-nine percent of persons vaccinated this season were 50 years of age or older. One hundred twenty-three children less than 5 years of age were vaccinated (2% of total), representing the target population for New Jersey's daycare/preschool immunization mandate.

Ninety percent of vaccine recipients identified themselves as White and 4% as Black. Four percent identified themselves as Hispanic or Latino (down from 11%) and 55% as female. The percentage of Black and Hispanic or Latino residents who were vaccinated remains lower than population percentages. The majority of vaccine recipients were from Middle Township, Lower Township, and Cape May City. Vaccination rates (# persons vaccinated per 100 population) were highest in Cape May, Stone Harbor, and Avalon. The vaccination rates were lowest in Ocean City, Upper Township, and West Cape May.

Fifty-seven percent of persons vaccinated by the Department of Health received their vaccine at the drive-through clinic (up from 54%). An additional 36% were vaccinated at other scheduled clinics and 7% were vaccinated during non-clinic times.

Apart from the County Department of Health's vaccination activities, a number of residents received the influenza vaccine this season from local hospitals, physicians, pharmacies, and

supermarket clinics. Cape Regional Medical Center vaccinated 729 staff and volunteers in addition to 521 eligible patients, for a total of 1,250 influenza vaccinations this season.

Seventy-eight percent of those vaccinated this year by the County Department of Health were vaccinated last year. Seventy-two percent of those receiving the flu vaccine last year received it from the County, with 47% receiving their vaccine at the drive-through clinic. The high percentage of repeat clients demonstrates a high level of satisfaction with County flu clinics.

Additional information is available in the following appendices:

- Appendix A: Vaccination data for County Employees
- Appendix B: Program Management Recommendations

Program Overview

There were no supply issues with influenza vaccine in 2010-11. The 2009 Pandemic H1N1 strain was included as one of the three strains in the seasonal flu vaccine. Although the exact reasons are unclear, demand for vaccination was low, not only in Cape May County, but nationwide. This may be because it was the year after the pandemic and people were “tired of flu”, because the H1N1 strain was included in the seasonal vaccine and people thought they didn’t need it if they were vaccinated the previous year, and because 2010-11 was a mild flu season.

The County ordered 5,700 doses of FluZone seasonal flu vaccine from Sanofi-Pasteur (435 multi-dose vials, 1,000 single-dose preservative-free vials, and 350 preservative-free pre-filled syringes). The first seasonal flu vaccine shipment was received on August 18, 2010 and all vaccine was received by October 13, 2010, which was before the scheduled drive-through clinic. In addition, a new initiative was started with VaxCare, in which the Department administered vaccine to patients with Medicare Part B on behalf of VaxCare, earning a \$7.50 administration fee for each vaccine given and successfully billed. Through participating in the VaxCare program, the Department was able to offer seniors the new high-dose vaccine, in addition to the standard dose vaccine. 4,500 doses of vaccine were ordered (2,000 high-dose, 2,500 standard dose); 4,080 doses were returned unused, at no cost, to VaxCare at the end of the season.

Seven hundred thirty vaccine doses were transferred to partner organizations:

- 120 doses to Crest Haven Nursing and Rehabilitation Center
- 30 doses to Cape May County Technical High School LPN students
- 300 doses to Woodbine Developmental Center
- 230 doses to Volunteers in Medicine
- 50 doses to Belleplains Rescue EMS

Out of the remaining 4,970 doses ordered, 4,865 vaccinations were provided by the Department of Health and an additional 383 doses were provided under the VaxCare program, for a total of 5,248 doses administered.

The Department of Health organized one mass vaccination drive-through clinic on October 17, 2010; one clinic targeting children less than 18 years and their parents on November 3, 2010, and four special senior clinics for the VaxCare program on October 5, October 7, October 21, and October 26. At the senior clinics, residents who did not have Medicare Part B as their primary payor were offered a free flu shot out of the County’s vaccine order.

Additional vaccination efforts included six catch-up flu clinics and two clinics for County employees, as well as vaccine given to homebound residents and provided through sporadic appointments:

- County Employee Clinics, Oct 29, Nov 4
- Catch-up clinics, Nov 6, Nov 13, Dec 4, Dec 11, Dec 18, Jan 8

At the end of the influenza season, a total of 5,978 influenza vaccinations had been given to County residents, representing all 16 municipalities, with 5,248 vaccinations provided directly by the Department of Health. Apart from the County Department of Health’s vaccination activities, a

number of residents received the influenza vaccine from local hospitals, physicians, pharmacies, and supermarket clinics.

Cape Regional Medical Center vaccinated 729 staff and volunteers in addition to 521 eligible patients, for a total of 1,250 influenza vaccinations this season.

High-Priority Vaccination Groups

In 2010-11, the Advisory Committee on Immunization Practices (ACIP) recommended universal influenza vaccination for all persons 6 months of age and older. If vaccine is in short supply, ACIP recommends it be prioritized in order to protect those at high-risk for influenza complications. These high-priority groups include:

- Children aged 6 months through 4 years of age
- Persons aged ≥ 50 years
- Persons of any age with certain chronic medical conditions
- Pregnant women
- Residents of nursing homes and long-term care facilities
- American Indians/Alaskan Natives
- Morbidly obese (BMI ≥ 40)
- Household contacts and caregivers who have frequent contact with persons at high risk and who can transmit influenza to those persons at high risk
- Healthcare workers

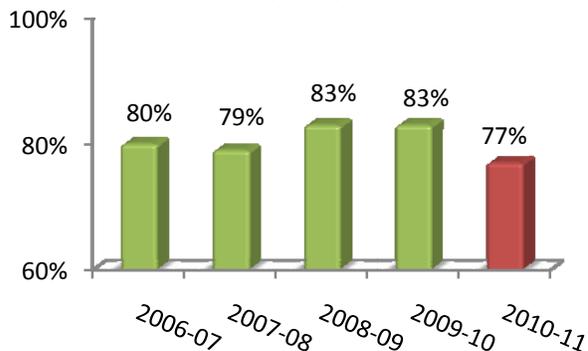
NJDHSS mandated flu vaccination for children 6 months to 59 months attending a licensed daycare or preschool in 2008-09. This mandate was enforced in the 2010-11 influenza season for the first time.

Out of 5,248 vaccine doses administered by the Department of Health, 4,036 (77%) were given to "high-priority groups," as defined by ACIP. The percentage of "priority" residents vaccinated by the Department of Health in 2010-11 is lower than the previous year.

Percentage Vaccinated by ACIP "High-Priority" Group



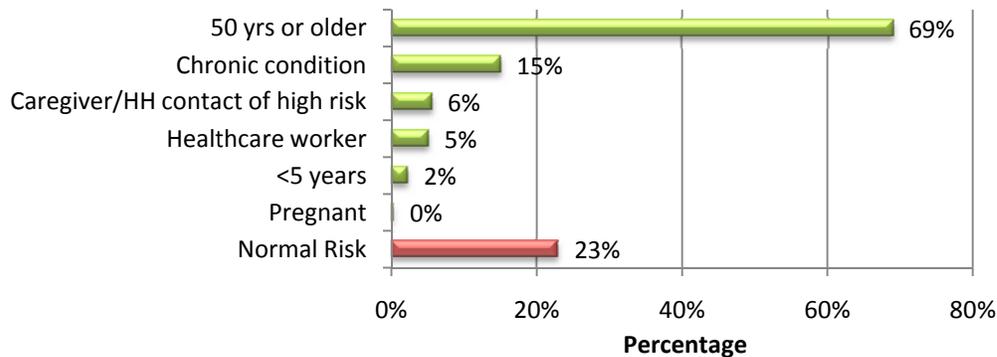
Percentage of Persons Vaccinated by CMCDH in ACIP Recommended Groups, by Year



Of the 4,036 persons in ACIP “high-priority” groups¹:

- 123 were children aged 6 months through 4 years,
- 3,576 were 50 years of age or older,
- 731 had a chronic health condition,
- 269 were household contacts or caregivers of persons at high risk,
- 248 were healthcare workers (including employees of long-term care facilities), and
- 17 were pregnant women².

Percentage of Persons Vaccinated by ACIP High-Priority Group



Demographics

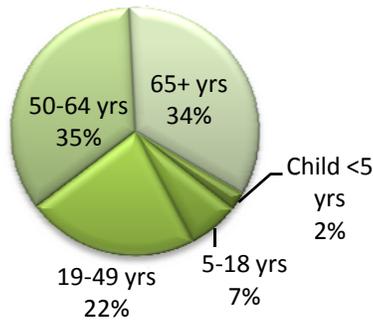
Age

The mean age of vaccine recipients was 54 years (median age 59 years), ranging from less than 1 year to 109 years (47 records missing age). The highest number of vaccinations - 1,800 (35%) was given to persons 50-64 years of age, followed closely by 1,776 vaccinations (34%) given to persons between 65 years and older. A total of 69% of vaccinations were given to persons aged 50 and older (higher than 65% in 2009-10). The percentage of persons aged 65 years and older is consistent with the previous two years. Two percent of vaccines were for children 0-4 years, with 9% given to all children (≤ 18 years).

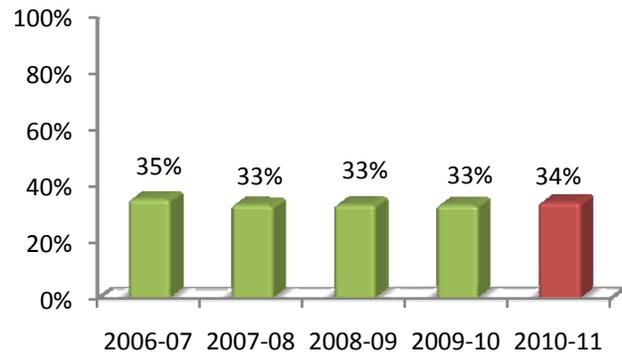
¹ Data on VaxCare patients (n=383) only includes age, city of residence, gender, and date vaccinated.

² Sums to greater than 4,036 owing to multiple high-risk categories for some residents.

Percentage of Vaccinated Residents by Age Group

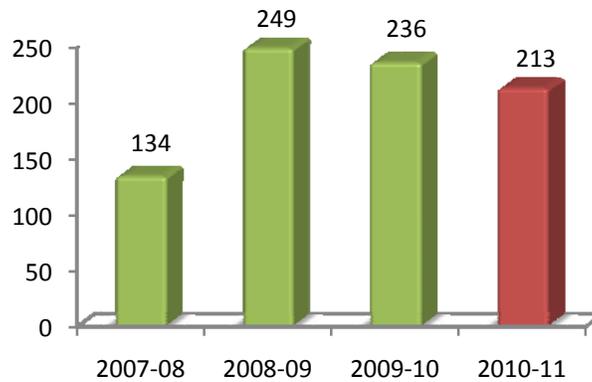


Percentage Vaccinations Administered to Persons 65yrs+, by Year



One out of 213 children (<1%) aged 9 years or younger were given a repeat booster vaccine.

Number Children <9 Years Vaccinated by CMCDH, by Year

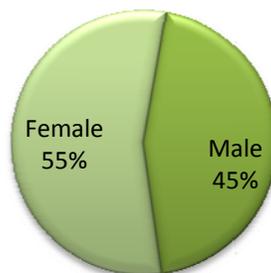


The minimum age for vaccination at the two drive-through clinics was lowered from 16 to 14 years. No vaccinations were given to persons less than 14 years of age at the drive-through clinic.

Gender

Two thousand nine hundred two (55%) of those vaccinated were female, 2,345 (45%) were male. The gender split was consistent with 2009-10.

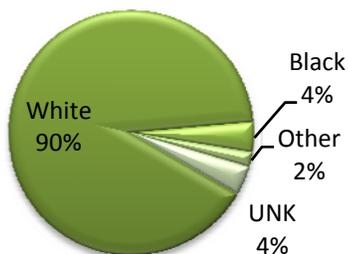
Percentage of Vaccinated Residents by Gender



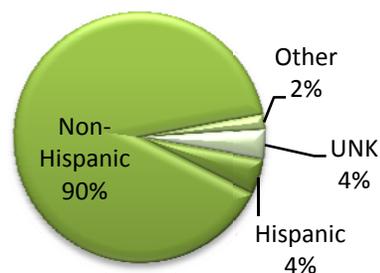
Race/Ethnicity

Out of a total of 4,865 vaccinations given by the Department of Health (excluding VaxCare, which did not collect data on race), 90% reported white race, 4% reported black race, 2% identified as other, and for 4% race was unknown or missing. Four percent of respondents identified themselves as Hispanic (compared to 11% in 2009-10). According to US Census data for 2010, 5.7% of respondents are Black (included in one or more races) and 6.2% are Hispanic or Latino (any race). The percentage of vaccine given to Black and Hispanic or Latino recipients is slightly lower than the population percentages.

Percentage of Vaccinated Residents by Race



Percentage of Vaccinated Residents by Ethnicity

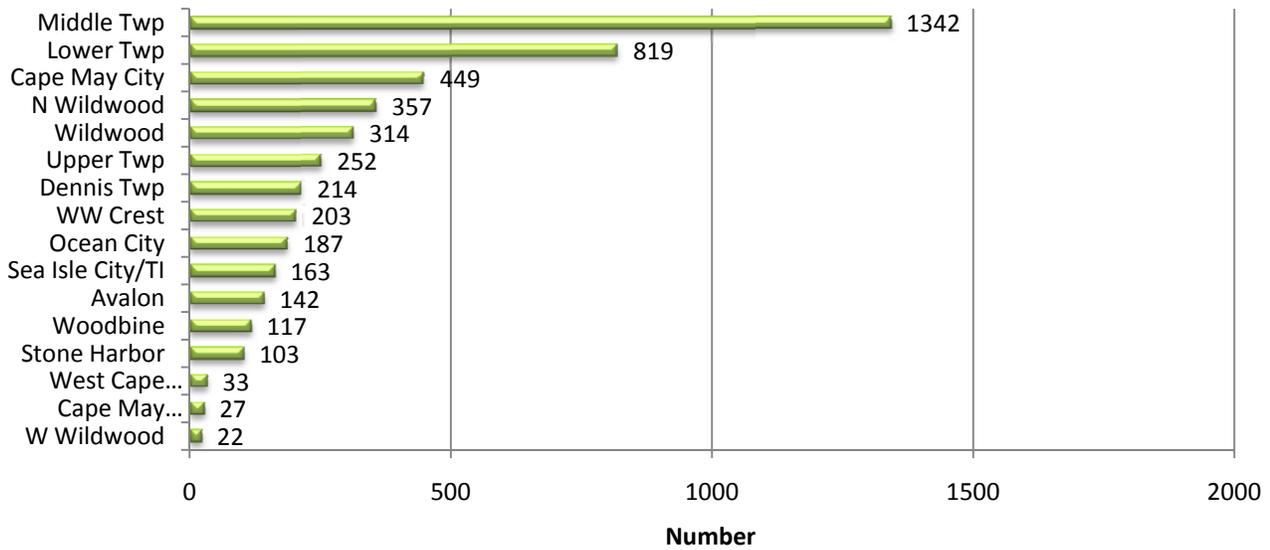


Residence

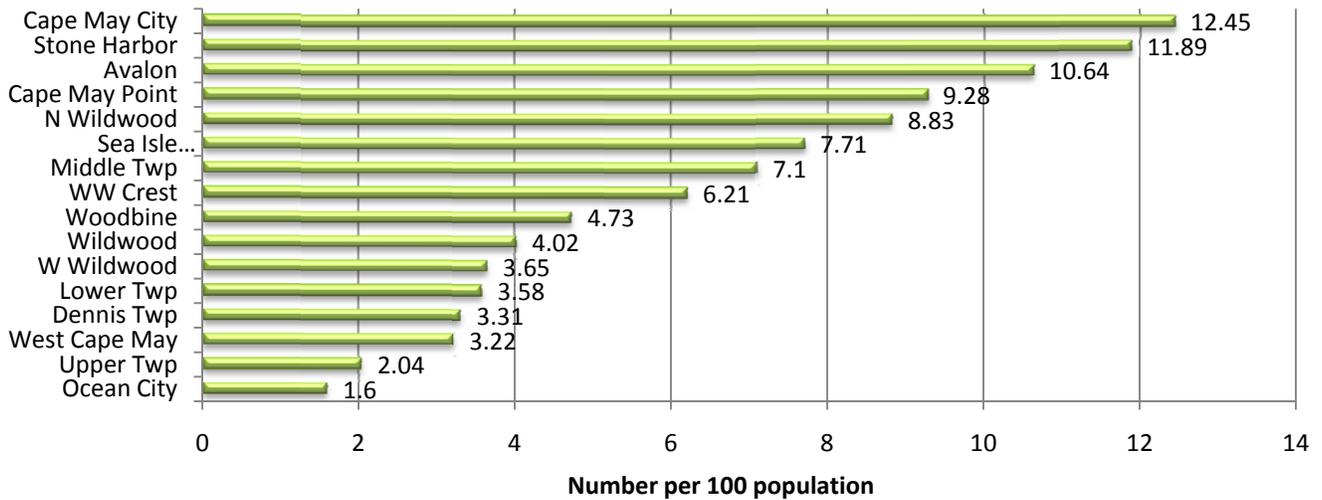
Residents were vaccinated from all 16 municipalities, with the highest number (1,342) living in Middle Township, followed by 819 from Lower Township and 449 from Cape May³. The vaccination rates (# persons vaccinated per 100 population), however, were highest in Cape May (12.45), followed by Stone Harbor (11.89) and Avalon (10.64). The lowest vaccination rates were in Ocean City (1.6), Upper Township (2.04), and West Cape May (3.22).

³ There were 163 (3%) vaccines given to persons listing an out-of-county address on the patient registration form. 6% of persons did not list municipality.

Total Number of Residents Vaccinated by Municipality



Vaccination Rate by Municipality

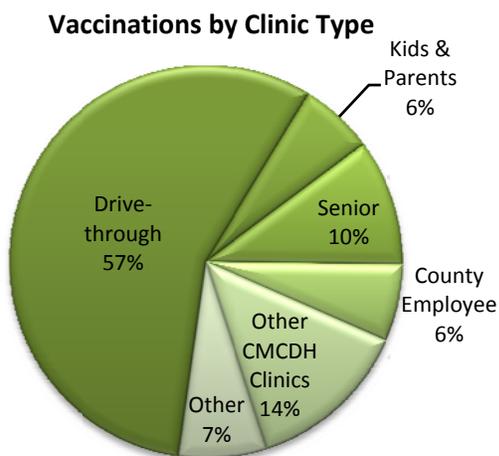


Out of the 163 persons vaccinated who listed an Out of County address, 52% were male and 56% were between the ages of 19-49. Fifty-four percent were in an ACIP “high-priority” group. Thirteen percent were healthcare workers.

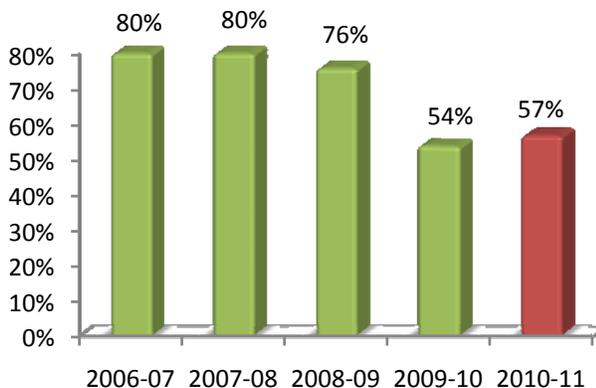
Date of Vaccination

Out of 5,248 vaccinations administered by the Department of Health, 2,966 (57%) were provided at the drive-through flu clinic. Seven hundred five vaccinations were provided at general Health Department clinics, 546 at Special Senior Clinics, 333 at the Employee Clinics, 319 at the Kids and Parents Clinic, and 379 were provided at other non-scheduled clinic times. The percentage of persons vaccinated at the drive-through clinic was slightly higher than 2009-10, but significantly less than previous years. This is because only one drive-through clinic was

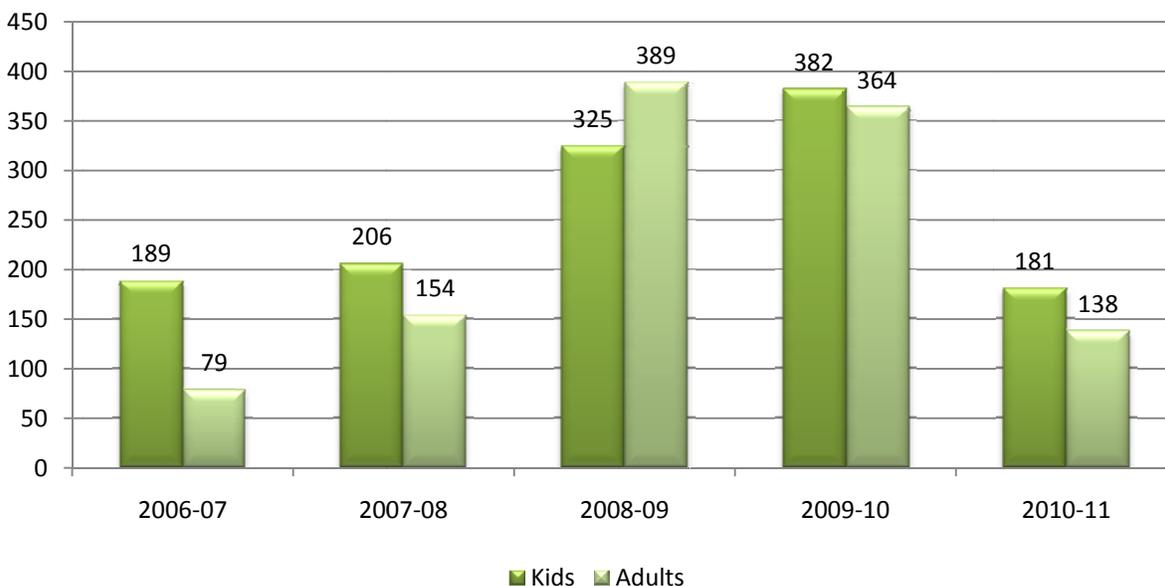
held in 2009-10 and 2010-11. The number of persons at the Kids and Parents clinic was much lower than in previous years, but may be reflective of the overall lower demand for vaccination.



Percentage Vaccinated by CMCDH at Drive-Through, by Year



Vaccinated at Children's Clinics, by Year



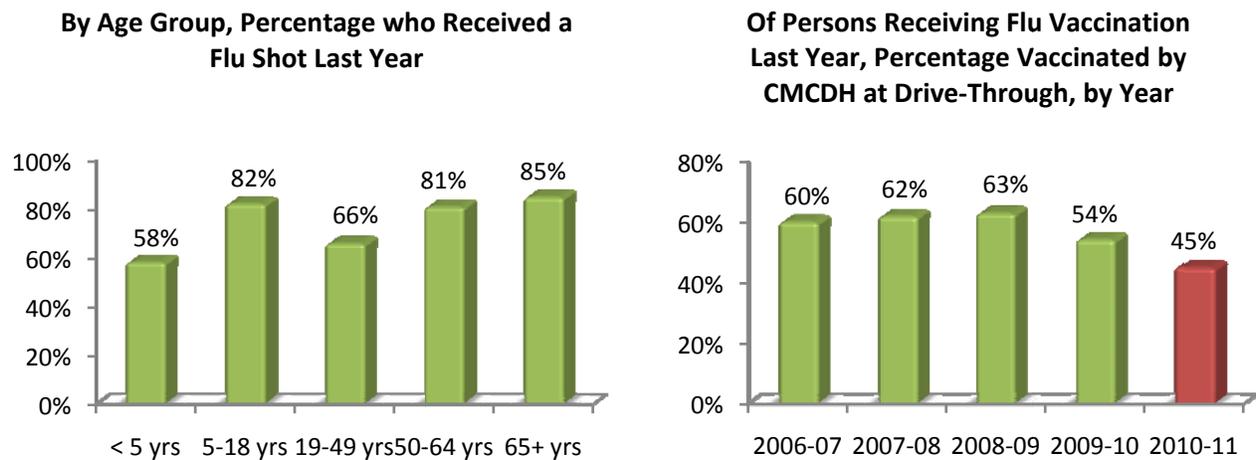
Clinical Information

Patients were asked about allergies to eggs, latex, and Thimerosal, if they had experienced a previous adverse reaction to the vaccine, if they had been told by a physician that they had ever had Guillain-Barré syndrome (GBS), and if they had a fever on the day of vaccination. Twenty-five residents (1%) reported an allergy. Eleven residents said they had experienced a previous adverse reaction to the vaccine, 1 resident reported a history of GBS, and 3 persons reported a fever on the day of vaccination. These individuals received further medical evaluation prior to receiving the influenza vaccine. The consent form states that persons with allergies or who have had GBS need a physician prescription to receive the vaccine. This prescription should be attached to the consent form. Seventeen records indicate a medical script was attached.

However, none of these records also have marked allergies or GBS. It is unclear what these scripts were for, or if these resulted from data recording/entry errors. Out of the 26 records that reported having an allergy or a history of GBS, none also marked that a physician script was attached. The one person who reported a history of GBS and 8 out of 25 (32%) persons with allergies were vaccinated at the drive-through clinic.

Vaccination History

Three thousand six hundred eighty-four persons (78%) who were vaccinated this year by the County had also received the influenza vaccine last year. By age group, over 80% of children 5-18 years and persons 50 years and older received a flu shot the previous year.

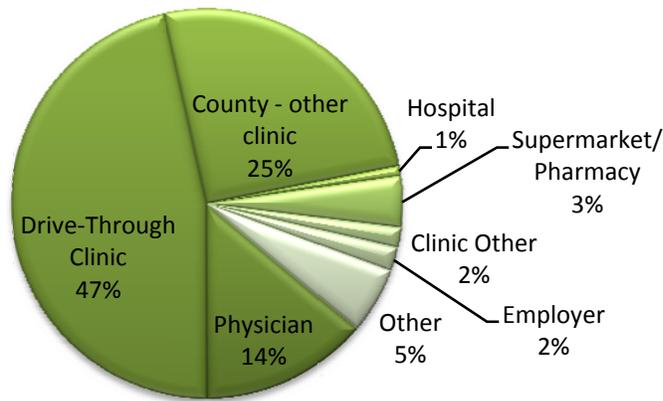


Three thousand five hundred twenty-eight residents out of 4,865 (73%) who received the vaccine last year specified where they received it. Responses were compiled into the following categories:

- Physician
- Drive-through flu clinic
- County clinic (non drive through)
- Supermarket or pharmacy
- Other type of clinic
- Hospital
- Employer

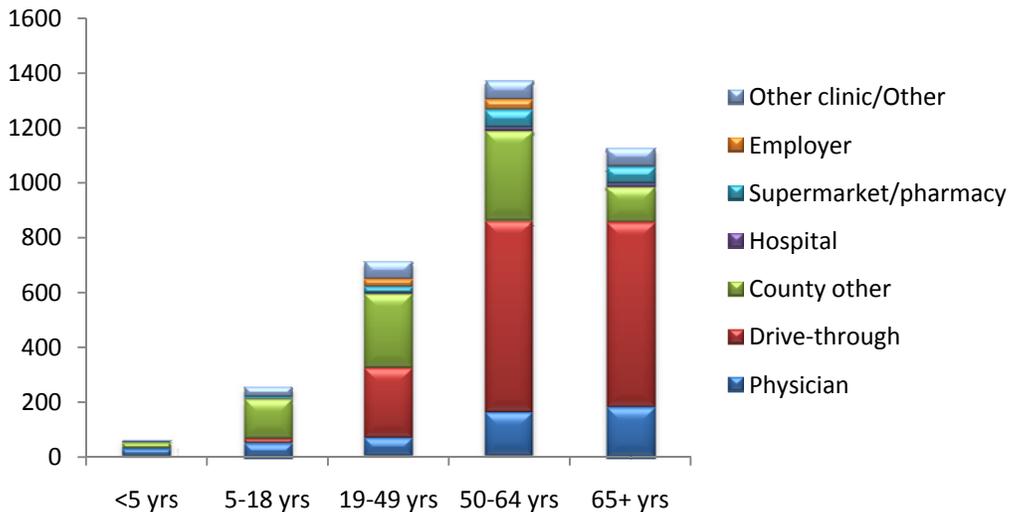
Seventy-two percent of those receiving the flu vaccine last year received it from the County, with 47% receiving their vaccine at the drive-through clinic. This percentage demonstrates a high level of satisfaction with Health Department flu clinics. The percentage of residents who received their flu shots at the previous year's drive-through clinic fell from 2009-10. This may be because there was only one drive-through clinic scheduled.

Where Residents Received Influenza Vaccine Last Year



By age group, children received their vaccine last year primarily from a County Department of Health clinic. Persons 50 years and older were most likely to have received their vaccine last year at the drive-through clinic and young adults 19-49 years received it either at the drive-through clinic or at another County Department of Health clinic.

Location of Last Year's Vaccine, by Age Group



Program Marketing

The Cape May County Department of Health’s marketing plan for the 2010-11 season was similar to 2009-10 with the addition of advertising in the Shoppe newspaper. For the drive-through clinic, it is critical that residents bring completed consent forms with them to the clinic, rather than obtaining and completing forms onsite. Having completed consent forms in advance improves traffic flow and the efficiency of the drive-through flu clinic. In addition, people stopping to complete consent forms in their cars is a safety hazard that the Department of Health aims to prevent. As part of the marketing effort, consent forms were disseminated in advance of the drive-through clinic to the public in a variety of settings:

- Health Department lobby and clinics
- Health Department’s website
- Paid placement in the Atlantic City Press, Herald, and Shoppe
- Spanish/Latin American groceries and churches (LINCS)
- Predominantly African American and Hispanic churches (LINCS)
- Healthcare community, including all physician practices, community clinics, hospitals, and EMS (via LINCS)
- Special needs groups, including County Departments of Aging and Social Services, US Coast Guard, County and Municipal senior centers, Municipal Halls, assisted living facilities, ARC, senior residences, Puerto Rican Action Committee, Cape Human Resources, School superintendents, School nurses, Churches (via LINCS)

Apart from placing the consent forms, information about the flu vaccination program was included in the following venues:

1. Health Department Flu Hotline
2. Radio spots on the Coast and WIBG
3. Well connect – direct telephone outreach through VaxCare

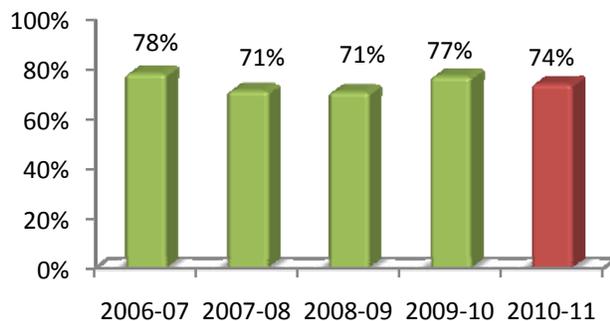
Continuing from last year, efforts were made to target African Americans and Hispanic residents, through the distribution of information and consent forms via LINCS. Hard copies were not distributed to these groups this year.

Of the 2,966 persons receiving their influenza vaccination at the drive-through clinic, 2,959 forms (99.8%) were entered with source information. Of the 2,959 records with source information, 2,176 residents (74%) brought a completed consent form with them. The remaining 783 (26%) received and completed a consent form when they arrived at the drive-through clinic. The percentage of persons bringing an advance consent form was slightly lower than last year and remains shy of the 80% goal. Of those who received their vaccine at the drive-through clinic the previous year, 77% brought a completed consent form with them.

Percentage of Flu Consent Forms Completed in Advance



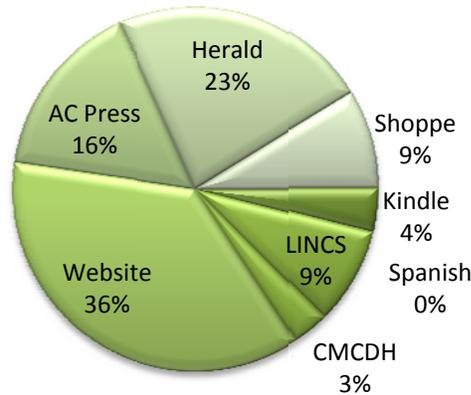
Percentage Persons with Advance Consent Forms for Drive-through, by Year



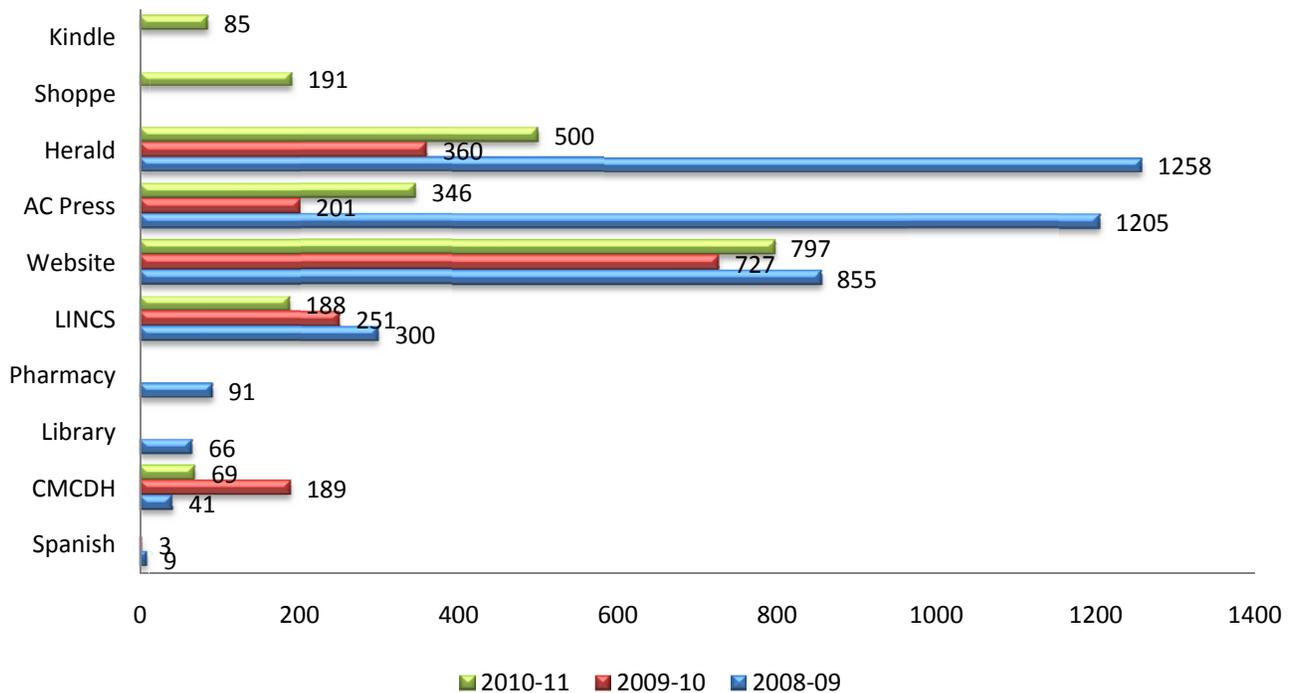
Of those that brought a completed consent form, the majority obtained their forms from the CMCDH website (36%), followed by the Herald newspaper (23%) and the AC Press (16%). The percentage of forms received from LINCS decreased from 14% in 2009-10 to 9% this year. The Shoppe, which was a new advertising source, produced 9% of advance consent forms, which is

more than any other alternate newspaper tried in past years. Kindle Ford has a large e-mail client list and was an important source of information, resulting in 4% of advance consent forms.

Source of Advance Consent Forms (%), Drive-Through Clinics

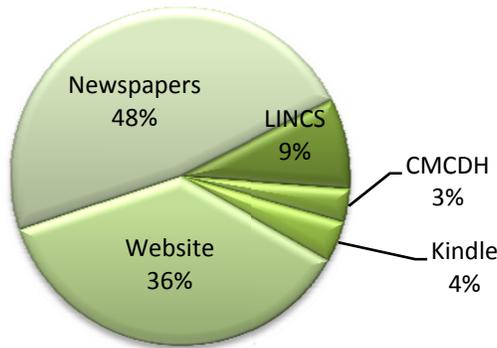


Source of Consent Form for Drive-Through, by Year

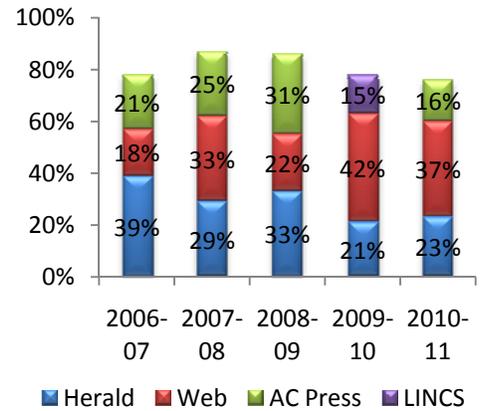


The use of newspapers as a source of consent forms increased this year, as did the website. While the website was used more than any single newspaper, newspapers as a group were the most used source of consent forms. LINC and the Health Department decreased as sources of forms. No Spanish-language forms were used this year. Disseminating these via LINC only without hard copies was not effective. Forty-eight percent of advance forms were brought from local newspapers, up substantially compared with 32% in 2009-10.

Source of Advance Consent Forms by Category

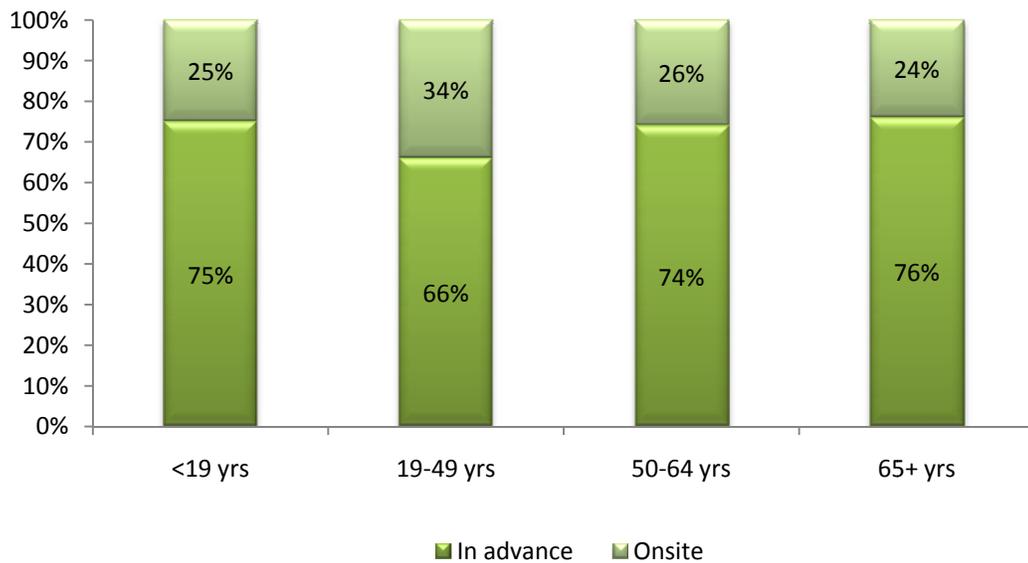


Top 3 Sources of Advance Consent Forms, by Year



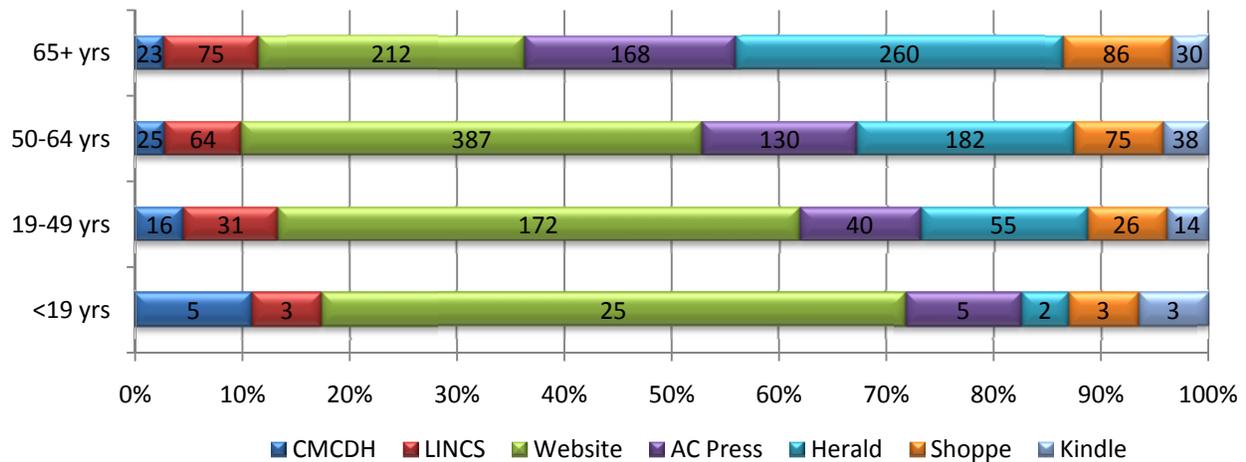
By age group, the percentage that brought an advance consent form decreased in all age groups from the previous year, with the lowest percentage among 19-49 year olds.

Percentage with Completed Consent Forms, by Age Group



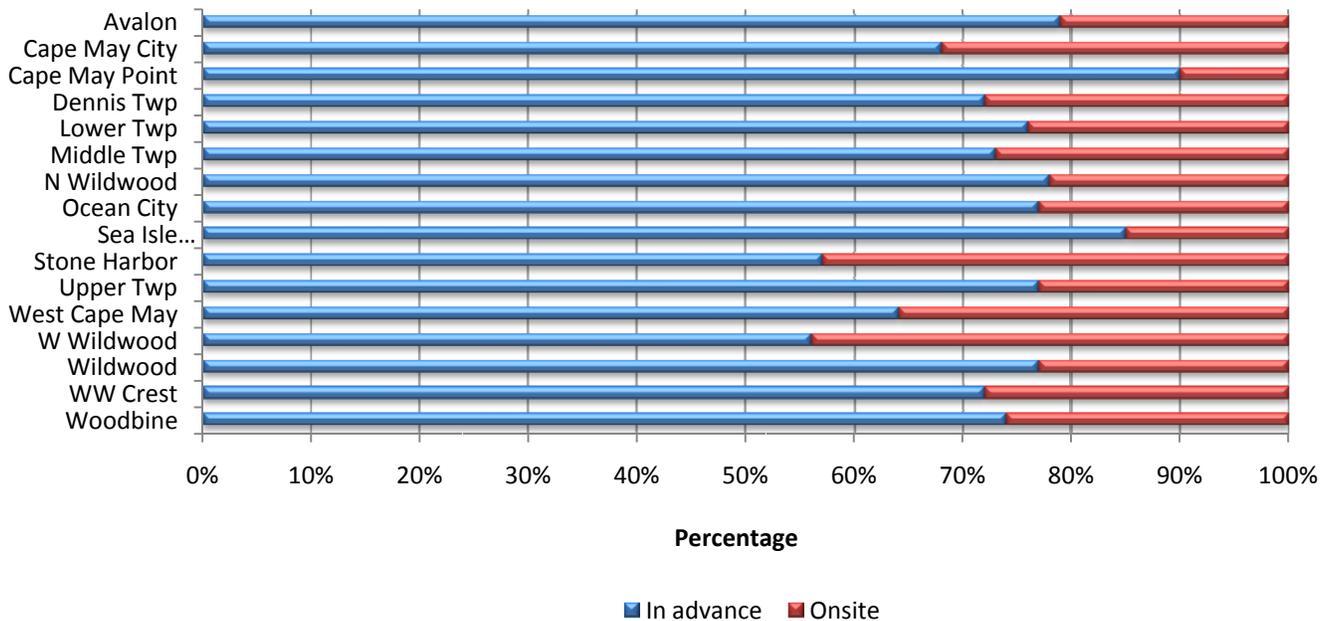
Persons <65 years were most likely to bring a completed consent form from the Health Department website. While the website was used frequently by persons 65 years and older, the majority of forms came from the Herald. Newspaper usage increased for all papers, with age.

Source of Advance Consent Forms, by Age Group



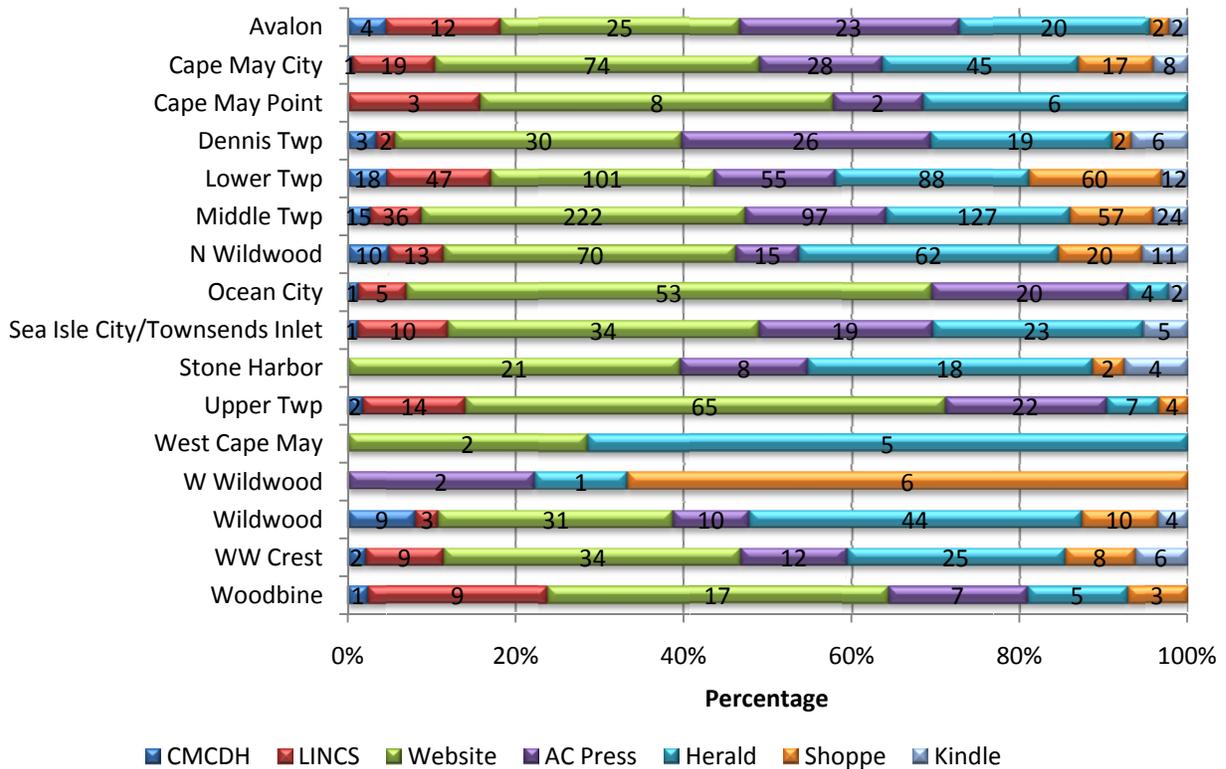
Cape May Point, Sea Isle City, and Avalon had the largest percentage of advance consent forms, with West Wildwood, Stone Harbor, and West Cape May having the lowest percentages of advance consent forms. Only 2 out of 16 municipalities (13%) met or exceeded the goal of 80% (compared to 75% of municipalities in 2009-10).

Percentage Advance Consent Forms by Municipality



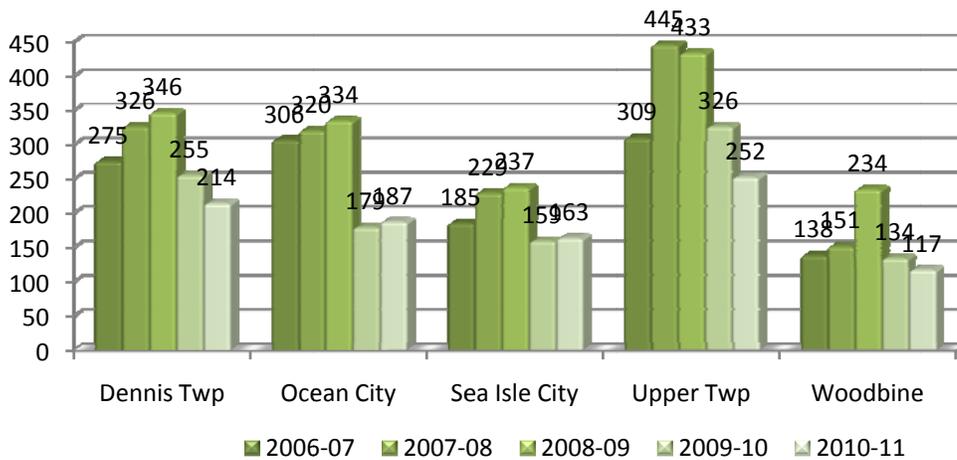
The website was used often in all municipalities except West Wildwood. The Herald was used widely with the exception of Ocean City, Upper Township, and Woodbine.

Source of Advance Consent Forms by Municipality

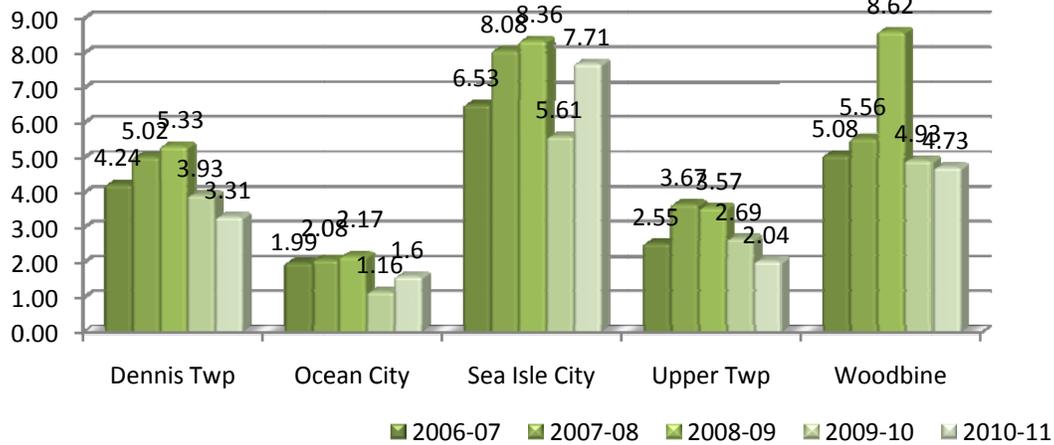


Efforts continue to increase the number of residents receiving their flu shots from the northern part of the County. Targeted municipalities include Dennis Township, Ocean City, Sea Isle City, Upper Township, and Woodbine. The vaccination rate per municipality decreased in Dennis Township, Upper Township, and Woodbine, but increased in Ocean City and Sea Isle City. Holding a senior clinic in Ocean City may have contributed to the increases.

Number Residents Vaccinated, 2006-07 through 2009-10

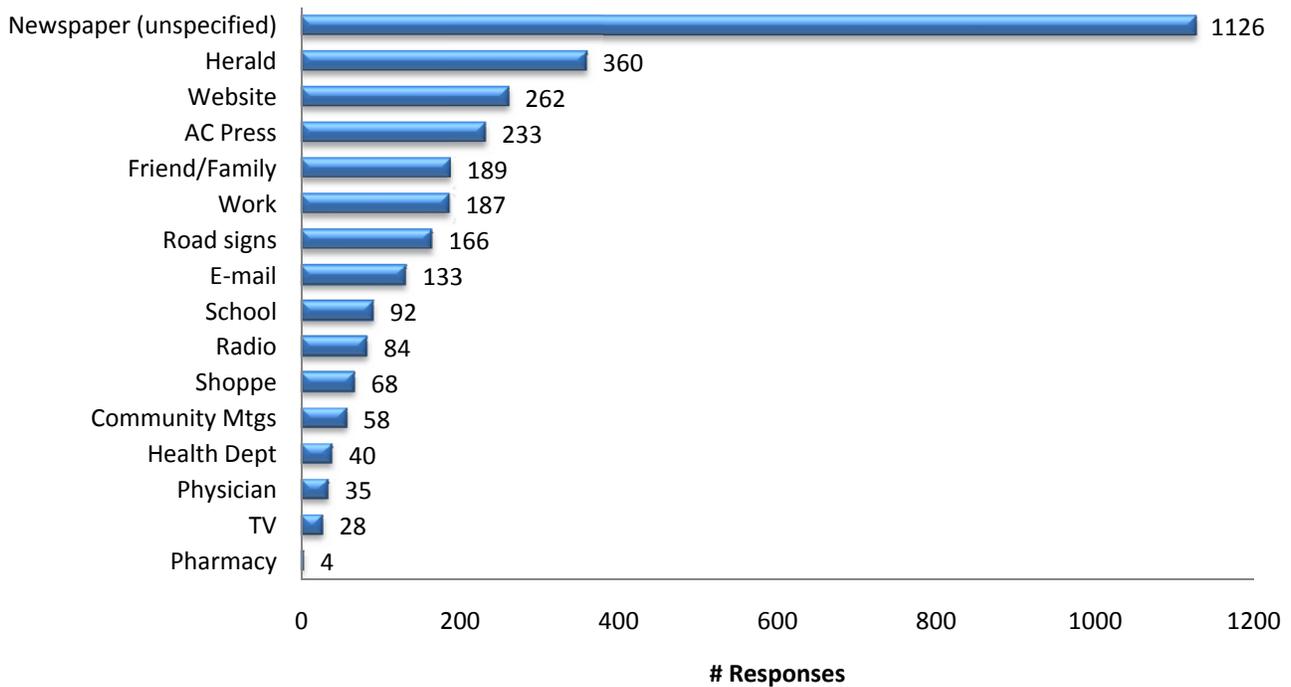


Vaccination Rate (per 100 population), 2006-07 through 2008-09



Respondents were asked where they heard about that day's flu clinic. Newspapers were overwhelmingly the primary source of information. The website was also consulted frequently and the road signs were also an important reminder.

Where did you hear about today's flu clinic?



Additional Information

Demographics by ACIP "High-Priority" Vaccination Group and by Municipality are available upon request.