

# Cape May County Influenza Vaccination Activities, 2008-2009

## Program Summary

There was no shortage of influenza vaccine for the 2008-09 season and the Cape May County Department of Health received their initial vaccine shipment at the end of September. Cape May County ordered a total of 7,250 doses of FluZone vaccine from Sanofi Pasteur (525 multi-dose vials, 1,000 single-dose preservative-free vials, and 1,000 pre-filled syringes). This amount was 250 doses less than what was ordered for the 2007-08 flu season. The Department of Health organized two mass vaccination drive-through clinics on October 26 and November 16, 2008 with a total of 5,418 people receiving their flu vaccine at one of these two clinics.

At the end of April 2009, a total of 7,521 influenza vaccinations had been given to County residents, representing 16 municipalities. Seven thousand ninety-six vaccinations were provided directly by the Department of Health. Out of these 7,096 vaccines, 83% were given to residents recommended to receive an annual flu shot. Sixty-nine percent of persons vaccinated this season were 50 years of age or older. The number of children less than 9 years of age almost doubled from 134 in 2007-08 to 249 in 2008-09. One hundred forty-one children vaccinated were less than 5 years, representing the target population for New Jersey's daycare/preschool immunization mandate.

Ninety-three percent of vaccine recipients identified themselves as white and 3% as black. Four percent identified themselves as Hispanic and 55% as female. The majority of vaccine recipients were from Middle Township, Lower Township, and Cape May City. The vaccination rates (# persons vaccinated per 100 population), however, were highest in Cape May, Cape May Point, and Stone Harbor. The vaccination rates were lowest in Ocean City, Upper Township, Lower Township, and Dennis Township (5.33).

Seventy-six percent of persons vaccinated by the Department of Health received their vaccine at one of the two drive-through clinics. An additional 15% were vaccinated at a clinic held at the Department of Health, 4% were vaccinated at a Vote & Vax community clinic, and 5% were vaccinated at the Department of Health 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 600 staff and volunteers in addition to 350 eligible patients, for a total of 950 influenza vaccinations this season.

Eighty-two percent of those vaccinated this year by the County Department of Health also received the influenza vaccine last year. Seventy-five percent of those receiving the flu vaccine last year received it from the County, with 63% receiving their vaccine at the drive-through clinic. The high percentage of repeat clients demonstrates a high level of satisfaction with the drive-through flu clinic.

Additional detailed information is available in the following appendices:

Appendix A: Demographics by ACIP Recommended Group

Appendix B: Vaccination data by municipality group

Appendix C: Marketing information by drive through clinic date

Appendix D: Vaccination data for County Employees

Appendix E: Program Management Recommendations

## Program Overview

There was no shortage of influenza vaccine for the 2008-09 season and the Cape May County Department of Health received their initial vaccine shipment at the end of September. Cape May County ordered a total of 7,250 doses of FluZone vaccine from Sanofi Pasteur (525 multi-dose vials, 1,000 single-dose preservative-free vials, and 1,000 pre-filled syringes). This amount was 250 doses less than what was ordered for the 2007-08 flu season.

Four hundred twenty-five doses were transferred to public health partner organizations to vaccinate their employees and/or clients:

- 90 doses to Volunteers in Medicine (VIM)
- 130 doses to Crest Haven Nursing and Rehabilitation Center
- 205 doses to Woodbine Developmental Center

Out of the remaining 6,825 doses, 7,096 vaccinations were provided by the Department of Health during the 2008-09 season (271 extra doses, or an additional 5.6% of the multi-dose vials were extracted using precise syringes). The Department of Health organized two mass vaccination drive-through clinics on October 26 and November 16, with a total of 5,418 people receiving their flu vaccine at one of these two clinics. Three clinics were held at the Department of Health targeting children less than 19 years and their parents. The “Children and their Parents” clinics were held on October 8, October 23, and October 29, 2008 and vaccinated 715 residents (325 children and 389 family members (1 missing age)). New this season, the Cape May County Department of Health participated in the national “Vote & Vax” program to offer flu vaccinations at polling sites on Election Day, November 4, 2008. Clinics were held at three selected polling sites, in Wildwood, Whitesboro, and Woodbine, and vaccinated 305 persons. An additional 658 people were vaccinated at County Employee Clinics, Child Health Clinics, or through sporadic appointments.

At the end of April 2009, a total of 7,521 influenza vaccinations had been given to County residents, representing 16 municipalities. Seven thousand ninety-six vaccinations were provided directly by the Department of Health<sup>1</sup>. 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 600 staff and volunteers in addition to 350 eligible patients, for a total of 950 influenza vaccinations this season.

## High-Risk Group Status

The Advisory Committee on Immunization Practices (ACIP) recommended influenza vaccination for the following groups in 2008-09:

- Children aged 6 months to 18 years of age,
- Pregnant women,
- Persons aged  $\geq 50$  years,
- Persons of any age with certain chronic medical conditions,
- 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, and
- Residents of nursing homes and chronic care facilities.

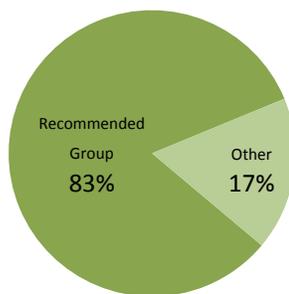
---

<sup>1</sup> 100 doses (1.4%) of vaccine were wasted and/or not used and ultimately destroyed.

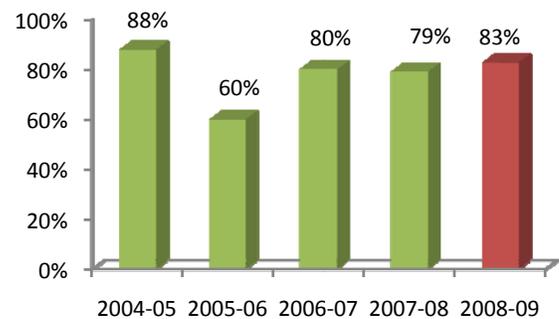
ACIP expanded their recommendation this season to include all children through 18 years, as opposed to children to age 5 years. Additionally, NJDHSS newly mandated flu vaccination for children 6 months to 59 months attending a licensed daycare or preschool. ACIP also clarified their recommendation for booster doses. Children aged 6 months to <9 years of age who had not been previously vaccinated should receive a second dose of vaccine  $\geq 1$  month after the initial dose. Children aged 6 months to <9 years who received only 1 dose in the 1<sup>st</sup> year of vaccination should receive 2 doses the following year. There were no changes for adult vaccination recommendations.

Out of 7,096 vaccine doses administered by the Department of Health to the public, 5,865 (83%) were given to residents considered to be “recommended for vaccination”, as defined by ACIP. The percentage of “recommended” residents vaccinated by the Department of Health in 2008-09 is slightly higher than in previous years<sup>2</sup>, which may have resulted from the expansion of recommended age groups.

**Percentage Vaccinated by ACIP Recommended Group**



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



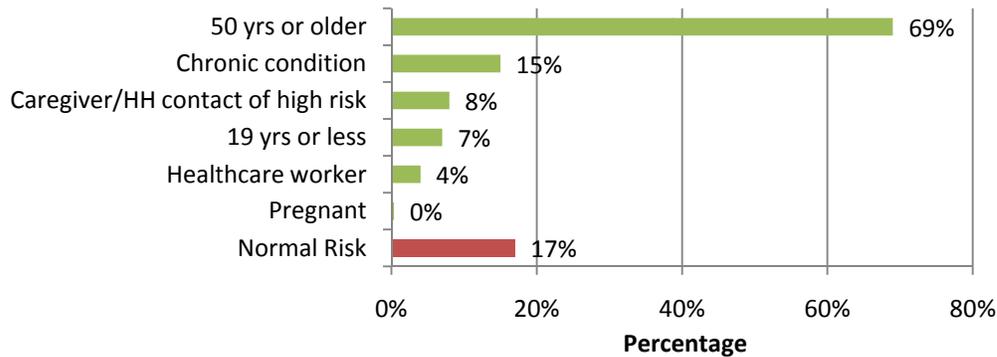
Of those recommended for vaccination by ACIP (n=5,865):

- 500 were children aged 6 months through 18 years,
- 4,929 were 50 years of age or older,
- 1,028 had a chronic health condition,
- 561 were household contacts or caregivers of persons at high risk,
- 284 were healthcare workers (including employees of long-term care facilities), and
- 25 were pregnant women<sup>3</sup>.

<sup>2</sup> High-risk groups are defined by CDC/ACIP each season. During 2004-05, vaccine was prioritized to target high-risk groups, resulting in a high percentage of high-risk persons receiving vaccine.

<sup>3</sup> Sums to greater than 5,865 owing to multiple high-risk categories for some residents.

## Percentage of Persons Vaccinated by ACIP Recommended Group



## Demographics

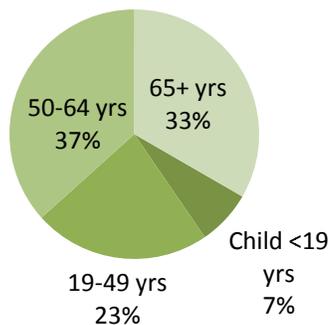
### Age

The mean age of vaccine recipients was 55 years, ranging from less than 1 year to 98 years (64 records missing age). The highest number of vaccinations 2,583 (37%) was given to persons between 50 and 64 years of age, followed by 2,346 vaccinations (33%) given to persons aged 65 and older. Sixty-nine percent of vaccinations were given to persons aged 50 and older. These percentages are consistent with the 2007-08 season.

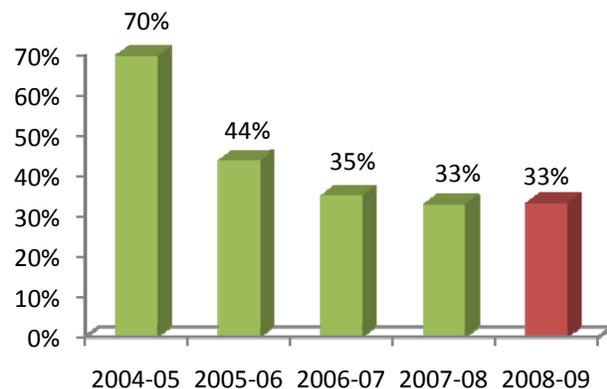
Nine out of 249 children (3.6%) aged 9 years or younger were given a repeat booster vaccine. The number of children vaccinated under 9 years almost doubled from 134 in 2007-08 to 249 this season. One hundred forty-one out of 249 children less than 9 years (57%) were under 5 years, representing the target population for New Jersey's daycare/preschool immunization mandate. The percentage of persons aged 65 years and older remained consistent with 2007-08. Twenty-six percent of persons 18-49 years reported having a high-risk status.

The minimum age for vaccination at the two drive-through clinics was 16 years. A total of 58 vaccinations were given to persons less than 19 years of age at the drive-through clinics.

Percentage of Vaccinated Residents by Age Group



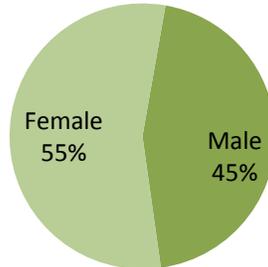
Percentage 65+ Persons Vaccinated by CMCDH, by Year



Gender

Three thousand one hundred eight-three (45%) of those vaccinated were male, 3,913 (55%) were female.

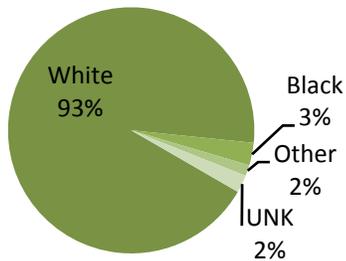
**Percentage of Vaccinated Residents by Gender**



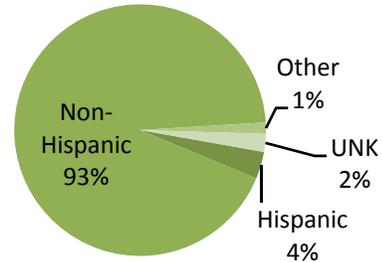
Race/Ethnicity

Race/ethnicity categories were modified for the 2008-09 season to try to better capture Hispanic ethnicity. Out of a total of 7,096 vaccinations given by the Department of Health, 93% reported white race, 3% reported black race, 2% identified as other, and for 2% race was unknown or missing. Four percent of respondents identified themselves as Hispanic.

**Percentage of Vaccinated Residents by Race**



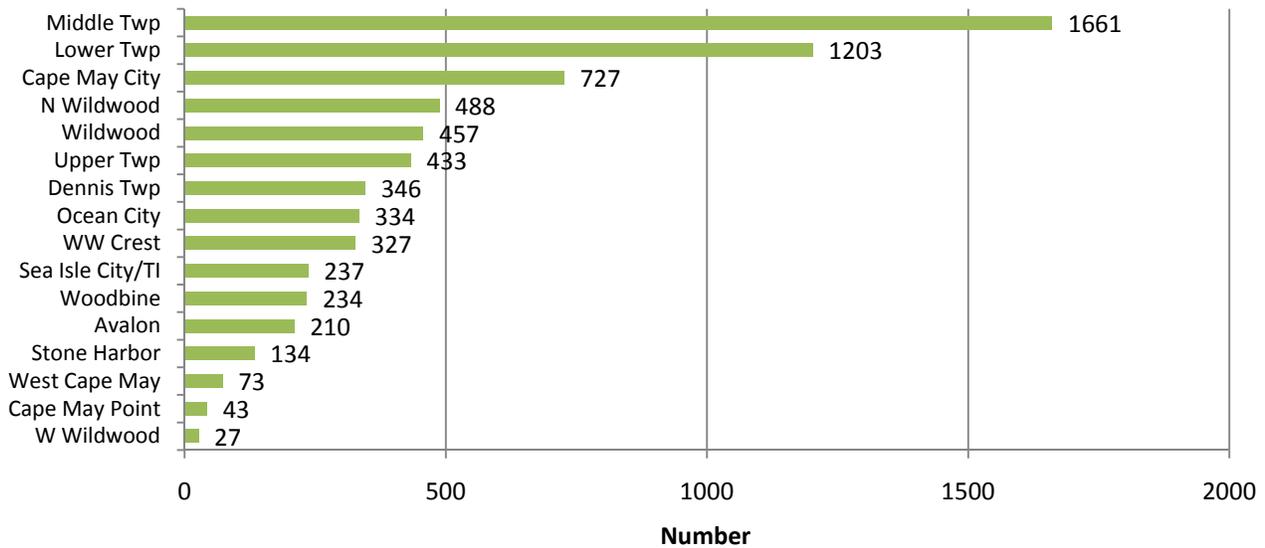
**Percentage of Vaccinated Residents by Ethnicity**



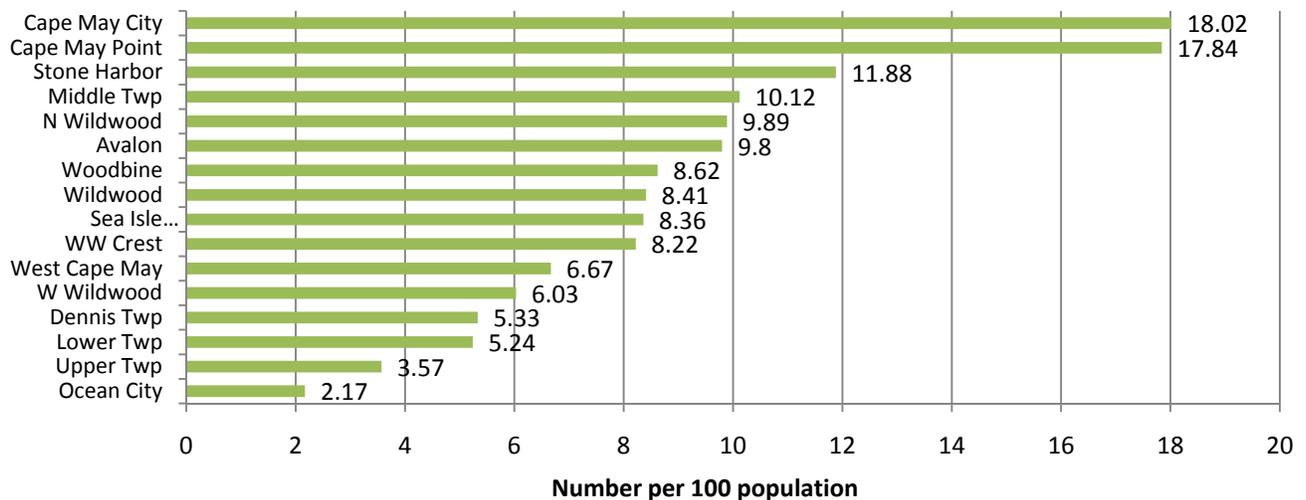
## Residence

Residents were vaccinated from all 16 municipalities, with the highest number (1,661) living in Middle Township, followed by 1,203 from Lower Township and 727 from Cape May<sup>4</sup>. The vaccination rates (# persons vaccinated per 100 population), however, were highest in Cape May (18.02), followed by Cape May Point (17.84) and Stone Harbor (11.88). The lowest vaccination rates were in Ocean City (2.17), Upper Township (3.57), Lower Township (5.24), and Dennis Township (5.33).

**Total Number of Residents Vaccinated by Municipality**



**Vaccination Rate by Municipality**



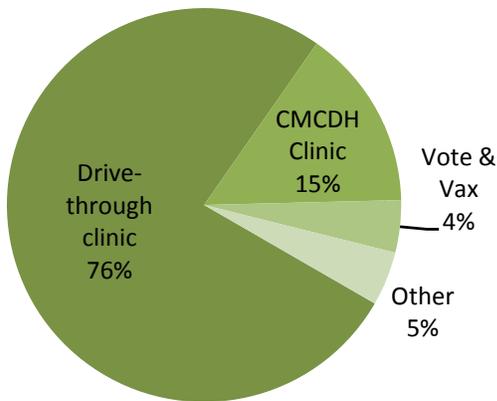
Out of the 139 persons vaccinated who listed an Out of County address, 51% were female and between the ages of 19-49. Sixty-two percent were in an ACIP recommended group. Nine percent were healthcare workers.

<sup>4</sup> There were 139 (2%) vaccines given to persons listing an out-of-county address on the patient registration form. Twenty-three persons did not list municipality.

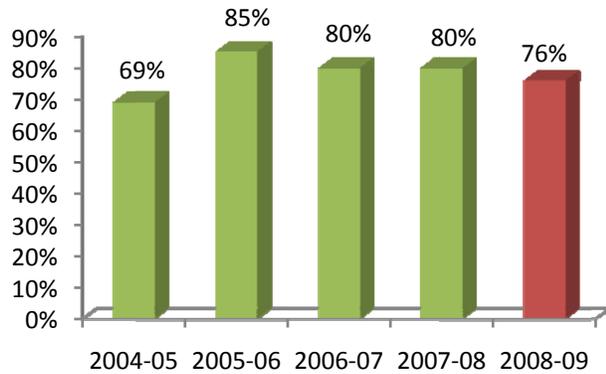
## Date of Vaccination

Out of 7,096 vaccinations administered by the Department of Health, 5,418 (76%) were provided at one of the two drive-through flu clinics. One thousand fifty-eight vaccinations were provided at Health Department clinics, 305 were provided at Vote & Vax clinics held at various community locations, and 315 were provided at other non-scheduled clinic times. The percentage of persons vaccinated at the drive-through clinic was slightly less than the 2007-08 season.

**Vaccinations by Clinic Type**



**Percentage Vaccinated by CMCDH at Drive-Through, by Year**



Note: For 2004-05, the Vo-Tech was used as the mass clinic strategy.

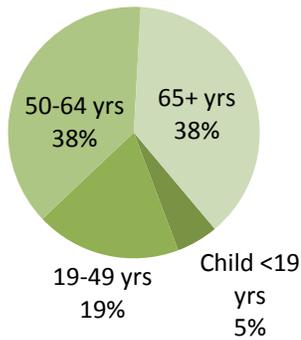
## Clinical Information

Patients were asked about allergies to eggs and Thimerosal. Patients were also asked 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. Three residents reported an allergy to eggs and 6 residents reported an allergy to Thimerosal. Fifty-five residents (less than 1%) said they had experienced a previous adverse reaction to the vaccine, 5 residents reported a history of GBS, and 6 persons reported a fever on the day of vaccination. These individuals received further medical evaluation prior to receiving the influenza vaccine.

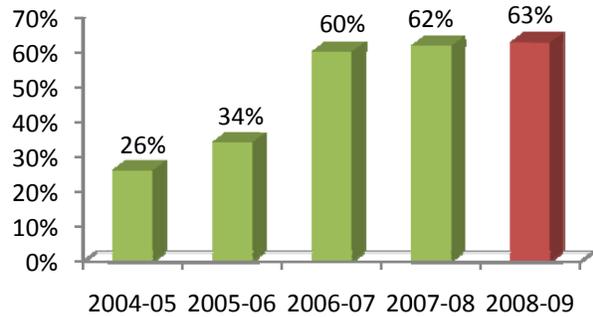
## Vaccination History

Five thousand seven hundred thirty-nine (82%) persons who were vaccinated this year by the County had also received the influenza vaccine last year. Of these 5,739 persons, 2,183 (38%) were 65 years or older and 2,175 (38%) were between 50-64 years.

**Residents Vaccinated Last Year by Age Group**



**Of Persons Receiving Flu Vaccination Last Year, Percentage Vaccinated by CMCDH at Drive-Through, by Year**

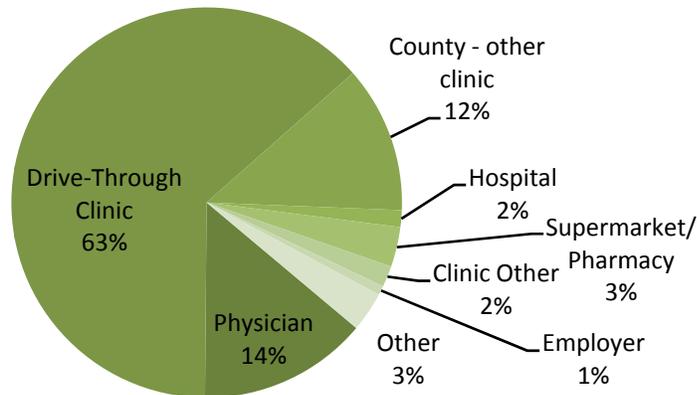


Five thousand five hundred seven residents out of 5,739 (96%) who received the vaccine last year specified where they received it. Responses were compiled into the following categories:

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

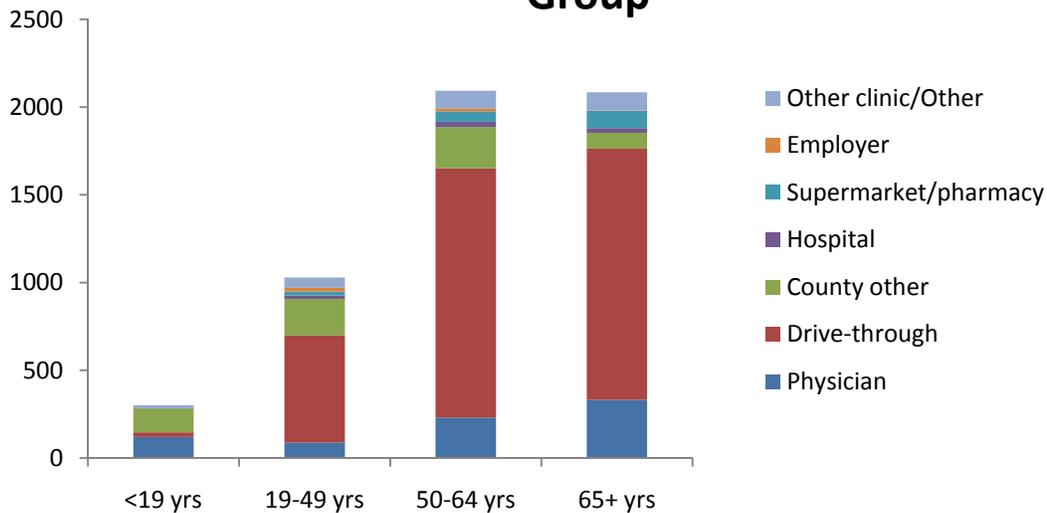
Seventy-five percent of those receiving the flu vaccine last year received it from the County, with 63% receiving their vaccine at the drive-through clinic. This percentage demonstrates a high level of satisfaction with the drive-through flu clinic.

**Where Residents Received Influenza Vaccine Last Year**



By age group, children less than 19 years received their vaccine last year primarily from their physician or at a County Department of Health clinic. In the three adult age groups, the majority who received their flu vaccine last year received it at the drive-through clinic, another County clinic, or their physician.

## Location of Last Year's Vaccine, by Age Group



### Program Marketing

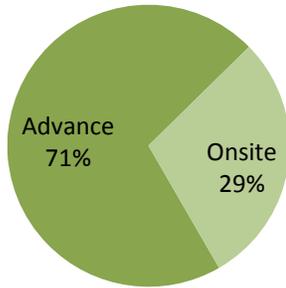
The Cape May County Department of Health’s marketing plan for the 2008-09 season included several strategies to promote the drive-through flu clinics as well as the Department of Health clinics. Particularly for the drive-through clinics, it is critical that residents bring completed consent forms with 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 wants to prevent. As part of the marketing effort, consent forms were disseminated in advance of the drive-through clinics to the public in a variety of settings:

- Health Department lobby and clinics
- Health Department’s website
- Advertising in the Atlantic City Press and Herald newspapers
- County Pharmacies and Libraries (hard copies)
- Spanish/Latin American groceries and churches (LINCS and hard copies)
- Predominantly African American and Hispanic churches (LINCS and hard copies)
- 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, assisted living facilities, ARC, senior residences, Puerto Rican Action Committee, Cape Human Resources, School superintendents, School nurses (via LINCS)
- Radio spots on WILW Oldies 94.3 and 96.7 the Coast

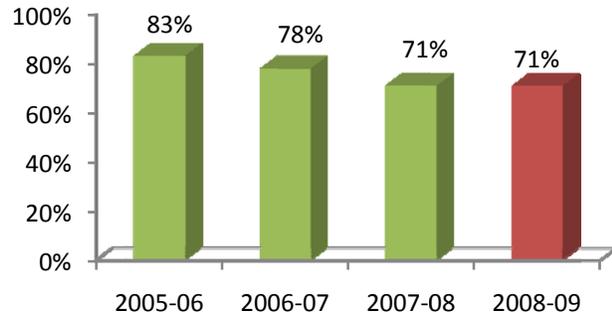
The only change in marketing for 2008-09 was the removal of the Ocean City Sentinel newspaper from the advertising budget, based on very low response in 2007-08. Continuing from last year, efforts were made to target African Americans and Hispanic residents, as well as residents in the northern part of the County.

Of the 5,418 persons receiving their influenza vaccination at one of the two drive-through clinics, 5,396 forms (99.6%) were entered with source information. Three thousand eight hundred twenty-nine residents (71%) brought a completed consent form with them. The remaining 1,567 (29%) received and completed a consent form when they arrived at the drive-through clinic. The percentage of persons bringing an advance consent form was consistent with 2007-08, although public information efforts highlighted the importance of bringing a completed form to the drive-through clinic. Of those who received their vaccine at the drive-through clinic the previous year (3,295), 74% brought a completed consent form with them.

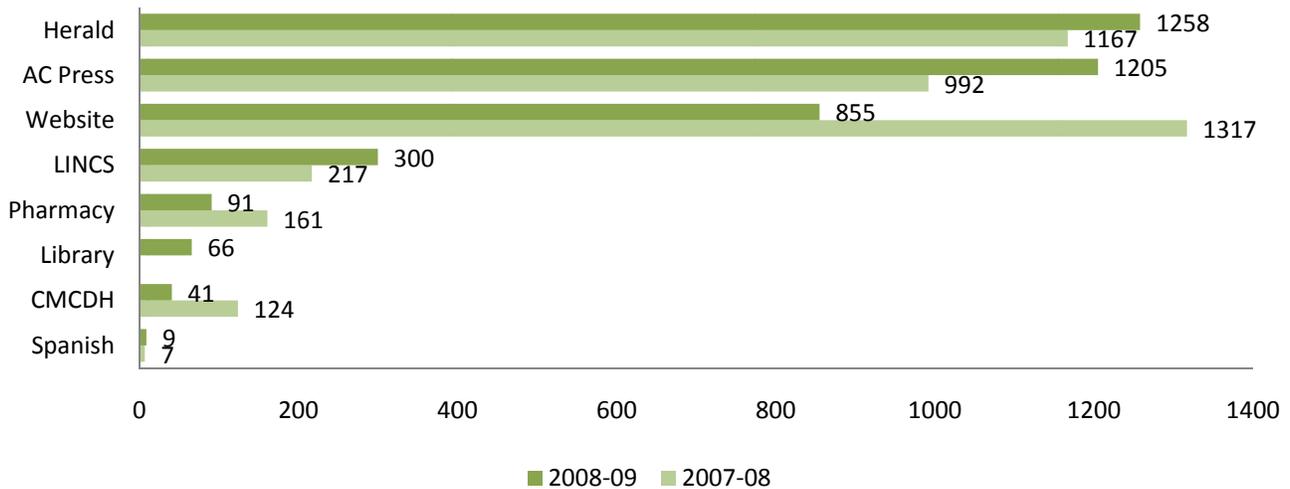
**Percentage of Flu Consent Forms Completed in Advance**



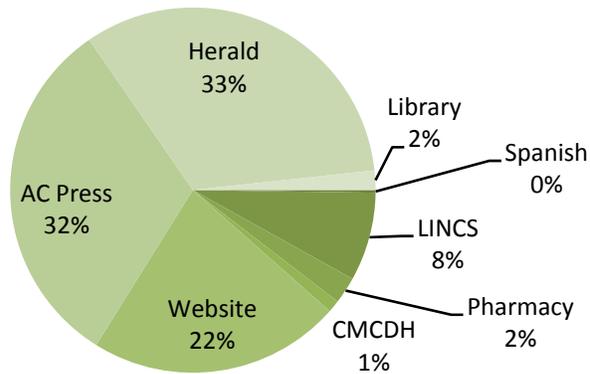
**Percentage Persons with Advance Consent Forms for Drive-through, by Year**



Of those that brought a completed consent form, the majority obtained their forms from the Herald newspaper (33%) followed closely by the Atlantic City Press (31%) newspaper. Twenty-two percent of residents downloaded the form from the Department of Health’s website, which is down 35% from 2007-08.

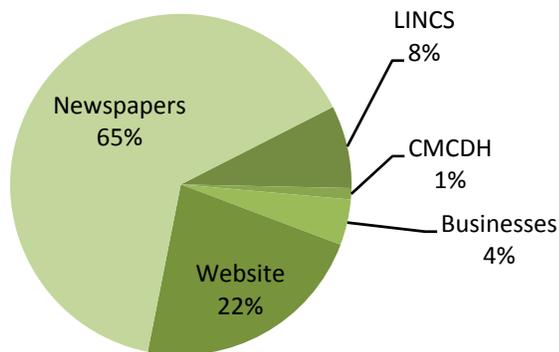


### Source of Advance Consent Forms (%), Drive-Through Clinics

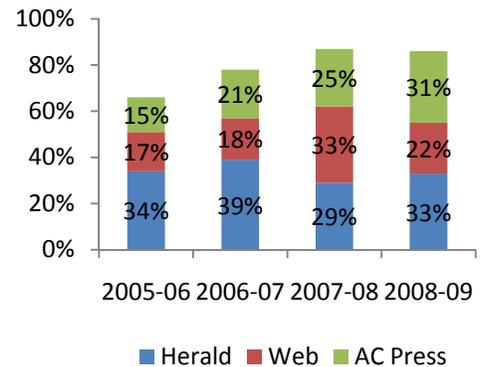


The Atlantic City Press continued to increase as a source for consent forms in the 2008-09 season, as did the number provided through LINCS communications (8%). A total of 64% of advance forms were brought from local newspapers. The number of Spanish forms remained low.

### Source of Advance Consent Forms by Category

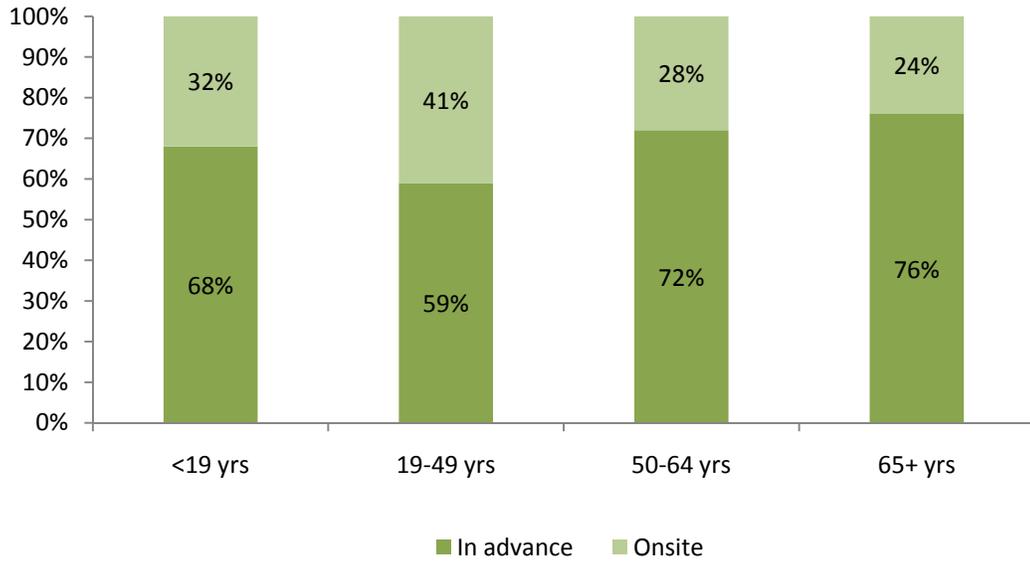


### Top 3 Sources of Advance Consent Forms, by Year



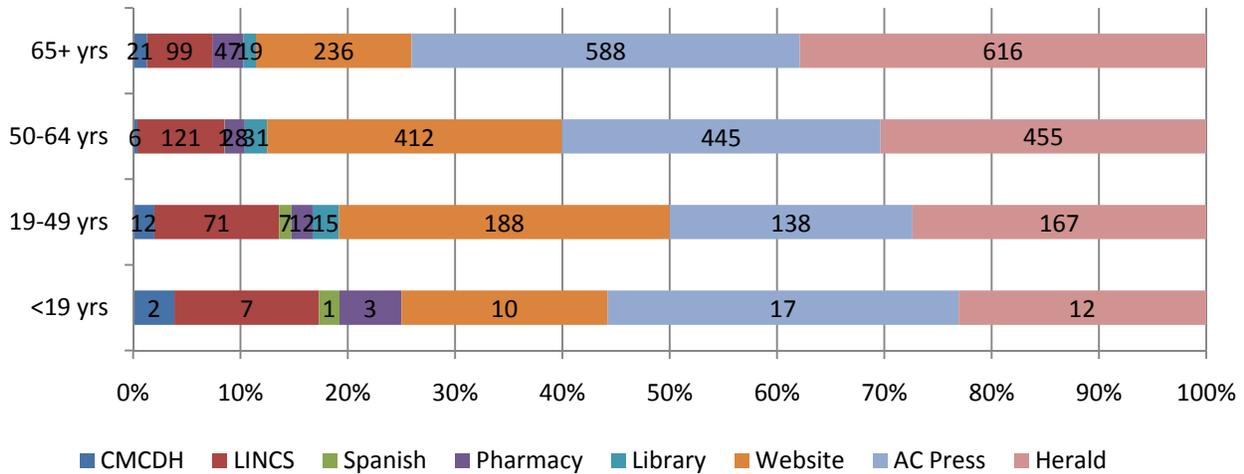
By age group, persons 65 years of age or older were most likely to bring a completed consent form (76%) with them to the drive-through clinic. In contrast, persons between 19-49 years of age were the least likely (59%).

### Percentage with Completed Consent Forms, by Age Group



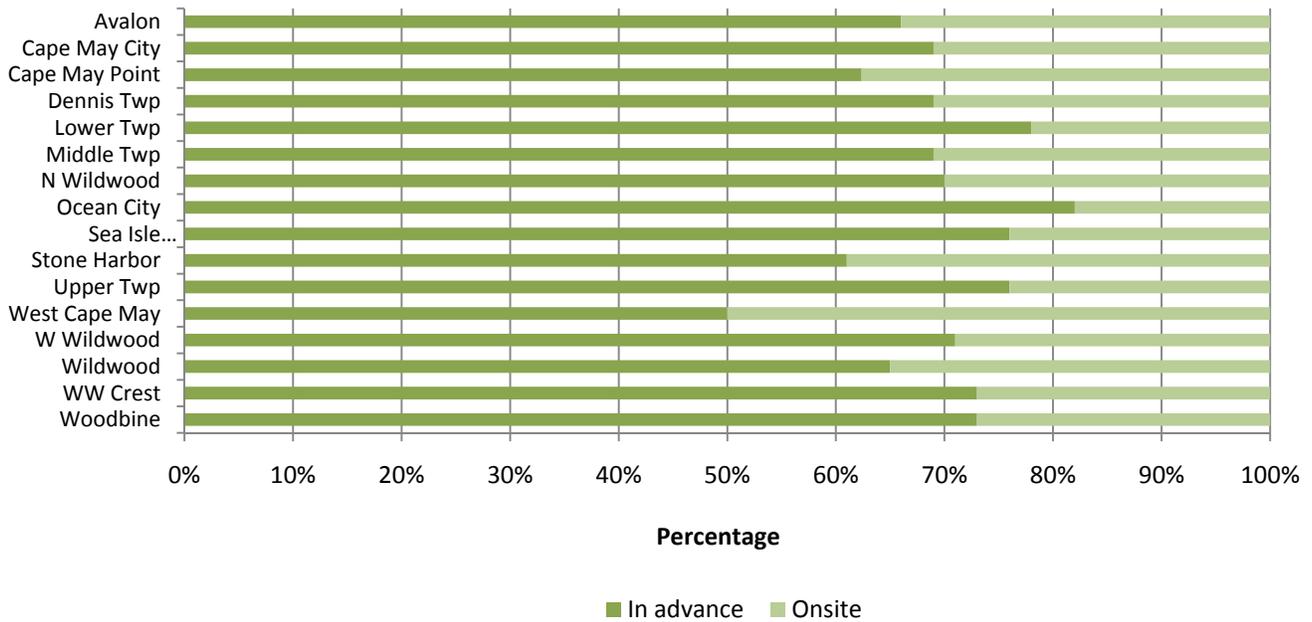
Persons across all age groups were most likely to bring a completed consent form from a newspaper. Persons 65 years of age or older were least likely to use the Department of Health’s website.

### Source of Advance Consent Forms, by Age Group



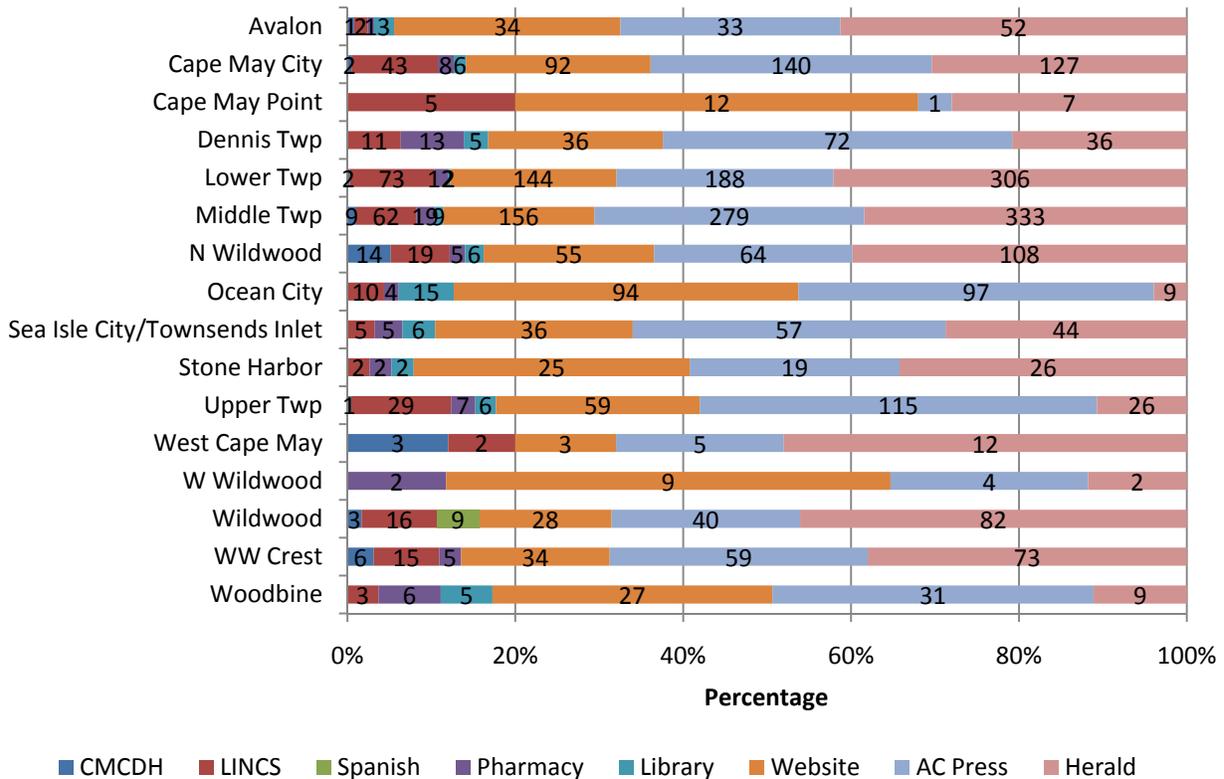
Ocean City, Lower Township, Sea Isle City, and Upper Township had the largest percentage of advance consent forms, with West Cape May, Stone Harbor, and Cape May Point having the lowest percentages of advance consent forms.

### Percentage Advance Consent Forms by Municipality



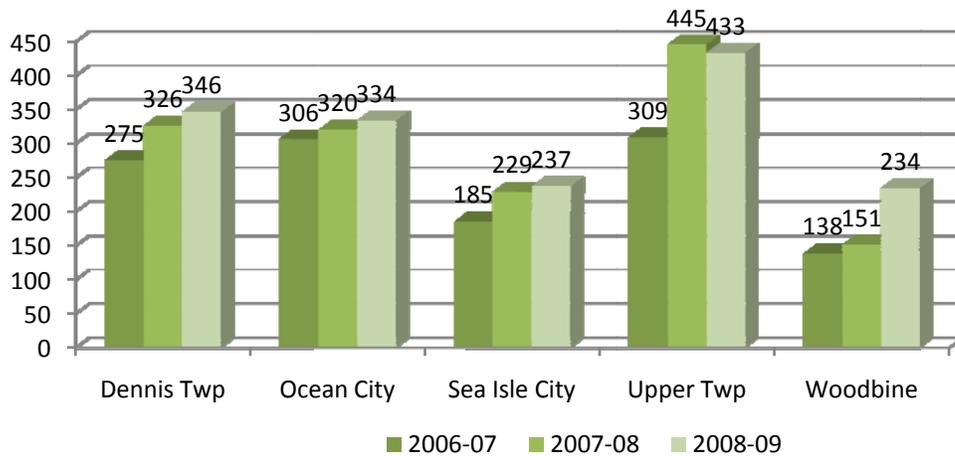
The Herald was used often in all municipalities with the exception of Dennis Township, Ocean City, Upper Township, West Wildwood, and Woodbine. The Atlantic City Press was used as a large percentage in all municipalities with the exception of Cape May Point. The website was a large percentage source in Cape May Point, Ocean City, West Wildwood, and Woodbine.

### Source of Advance Consent Forms by Municipality

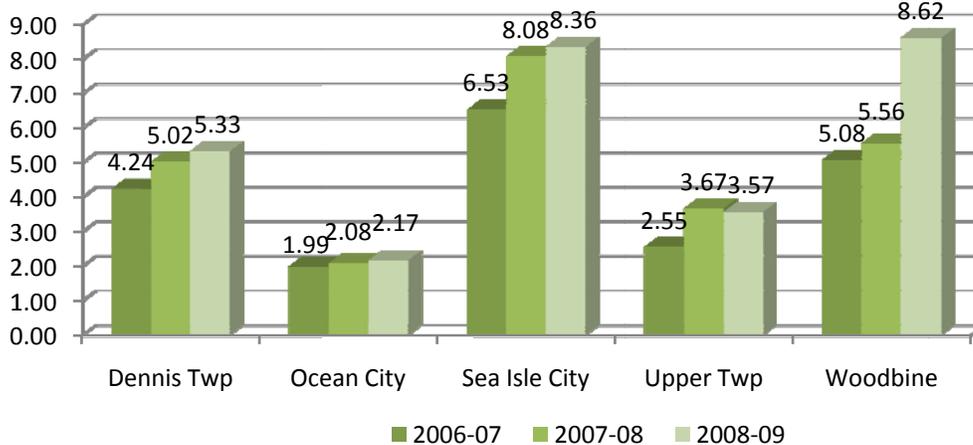


As mentioned earlier, several efforts were made to increase the number of residents receiving their flu shots from the northern part of the County. Targeted municipalities include Dennis Township, Ocean City, Sea Isle City, Upper Township, and Woodbine. Between 2006-07 and 2008-09, an increasing number of residents from each of these target municipalities received their flu shot from the County, with the exception of Upper Township in 2008-09. Similarly, the vaccination rate (per 100 population) increased in each of these municipalities, again with the exception of Upper Township in 2008-09. The sharp increase in numbers from Woodbine likely resulted from the Vote & Vax clinic held in Woodbine. The increased representation from the northern part of the County suggests that the increased marketing and outreach activities are having the desired effect, albeit gradually.

**Number Residents Vaccinated, 2006-07 through 2008-09**



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



Apart from the drive-through clinics, information was sent to the public through the press and to various groups to promote children and family clinics and the Vote & Vax clinics. Information was sent via LINCIS to:

- Daycare and preschool facilities
- Physicians
- Hospitals
- Parents via school superintendent
- Emergency Medical Services
- County Department of Aging
- County and Municipal senior centers
- Municipal clerks

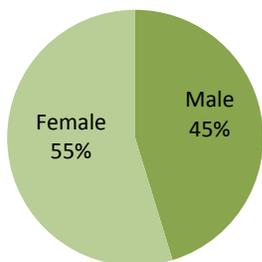
# Appendix A: Demographics by ACIP Recommended Vaccination Group

## 50 Years of Age and Older (n=4,929)

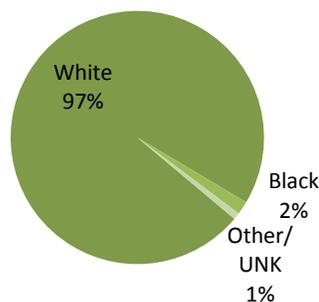
Gender and municipality of vaccinated persons aged 50 and older were consistent with summary indicators. Residents 50 years and older were more likely to be white and not Hispanic.

Within 50-64 years, mean age is 58 years, range 50 to 64. Within 65+ years, mean age is 73 years, range 65 to 98.

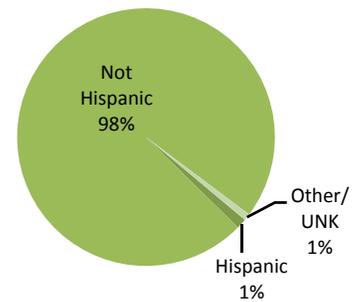
**Percentage of Residents 50+ yrs Vaccinated by Gender**



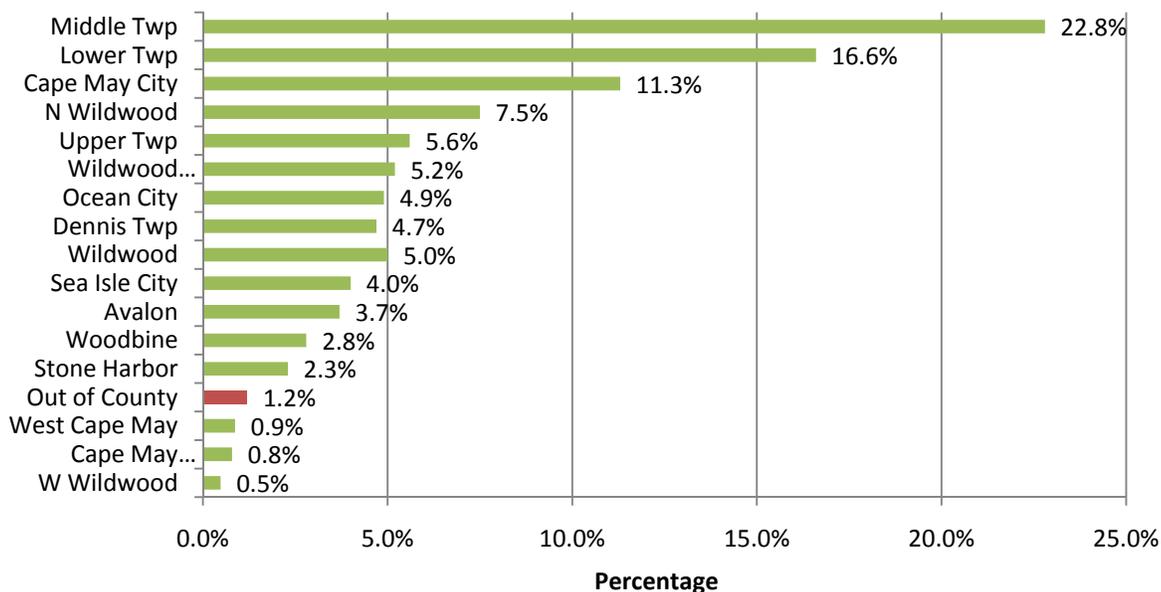
**Percentage of Residents 50+ yrs Vaccinated by Race**



**Percentage of Residents 50+ yrs Vaccinated by Ethnicity**



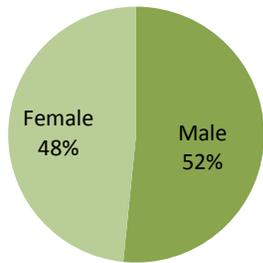
**Persons 50 years or Older Vaccinated by Municipality**



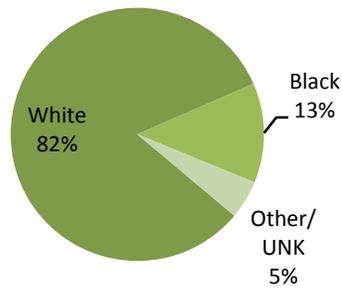
**Children <19 years (n=500)**

Vaccinated children aged 6 months through 18 years were less likely to be white and more likely to be black or other and Hispanic. This group was more likely to be male and to live in Wildwood.

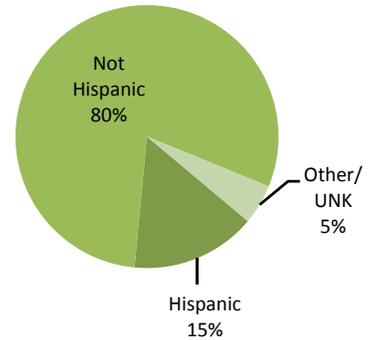
**Percentage of Children <19 yrs Vaccinated by Gender**



**Percentage of Children <19 yrs Vaccinated by Race**

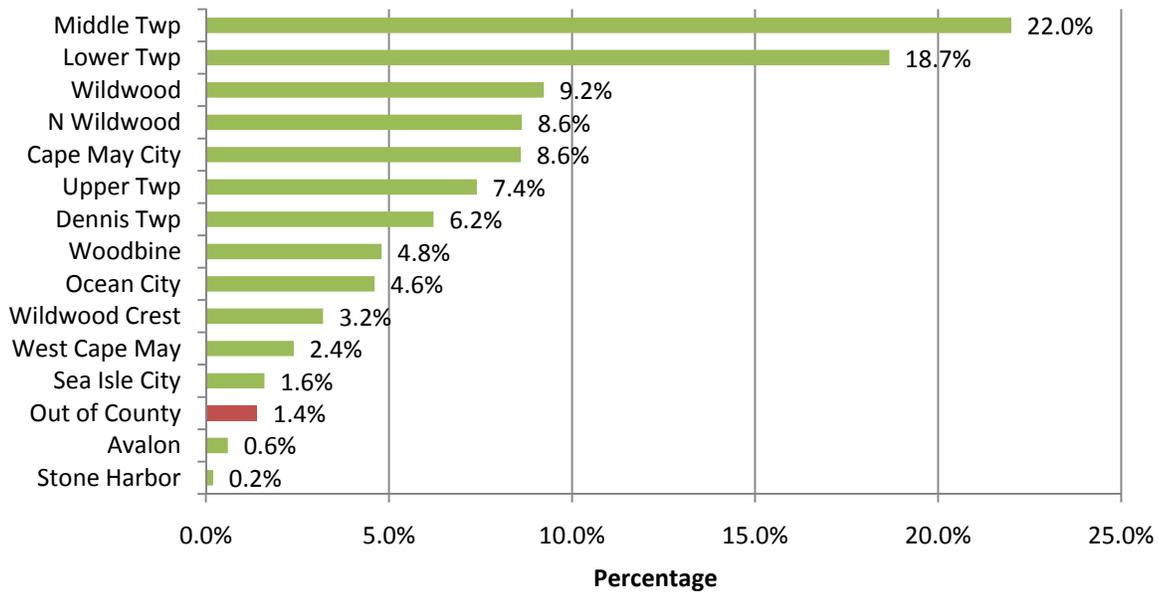


**Percentage of Children <19 yrs Vaccinated by Ethnicity**



Mean age is of <5 years is 3 years, range <1 year to 4; mean age of 5-18 years is 12, range 5-18.

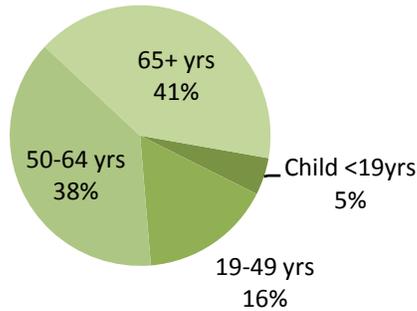
**Children <19 yrs Vaccinated by Municipality**



**Persons with Chronic Health Conditions (n=1,028)**

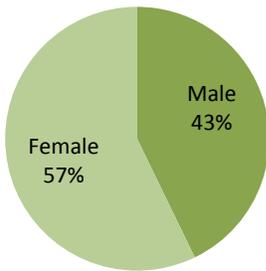
Vaccinated persons with chronic health conditions were more likely to be over 65 years of age and less likely to be between 19-49 years. Gender, race, and municipality were consistent with summary indicators.

**Residents with Chronic Conditions by Age Group**

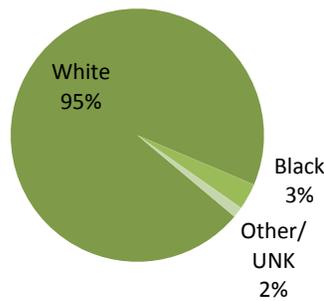


Mean age is 60 years, range 2 to 96.

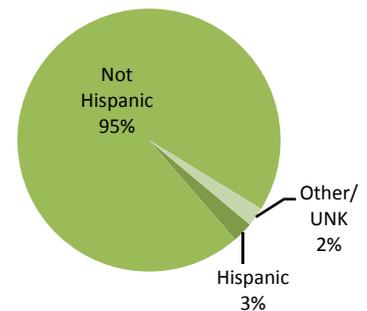
**Percentage of Residents with Chronic Conditions Vaccinated by Gender**



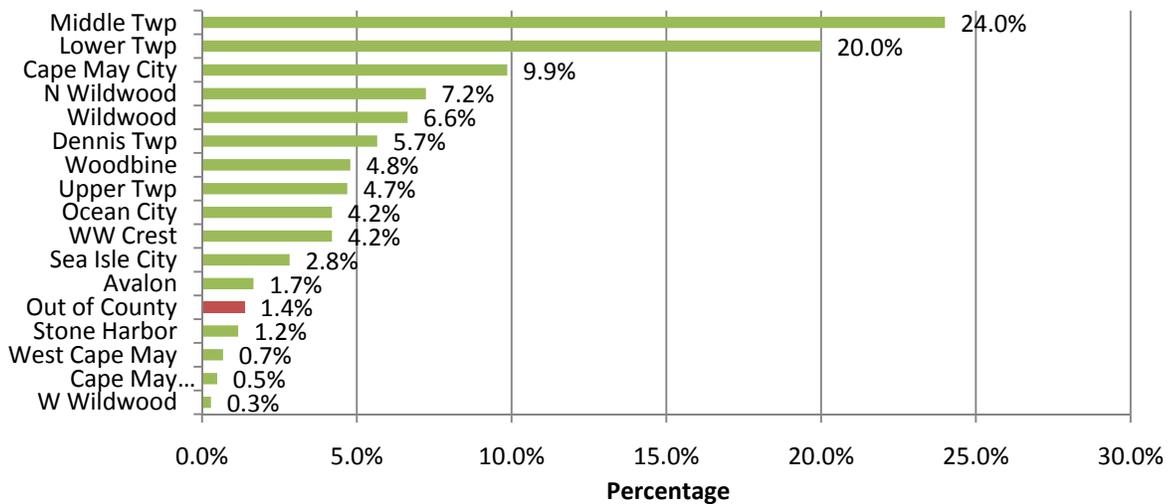
**Percentage of Residents with Chronic Conditions Vaccinated by Race**



**Percentage of Residents with Chronic Conditions Vaccinated by Ethnicity**



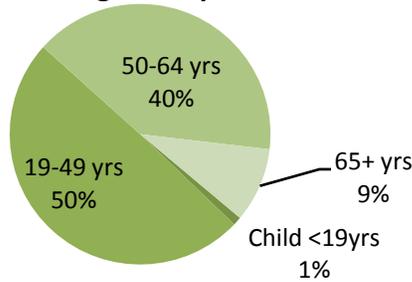
**Residents with Chronic Conditions Vaccinated by Municipality**



**Healthcare Workers (Including Long-Term Care and Assisted Living Employees) (n=284)**

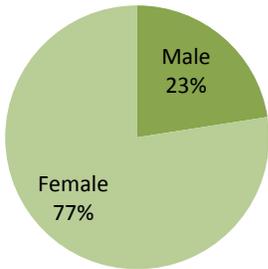
Vaccinated healthcare personnel were more likely to be 18-49 years of age or 50-64 years; more likely to be female; less likely to be white and more likely to be black. Residency and Hispanic ethnicity was fairly consistent. A higher percentage were out of county residents and were less likely to live in Cape May.

**Healthcare Workers with Chronic Conditions by Age Group**

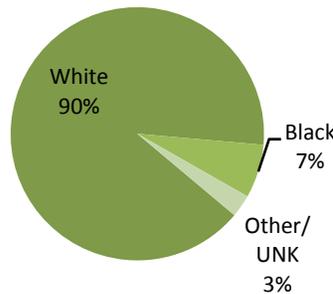


Mean age is 48 years, range 18 to 90.

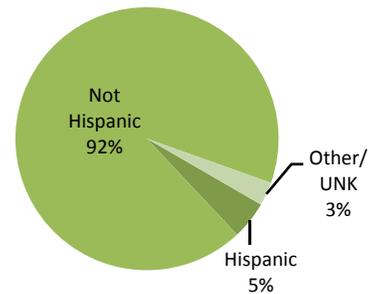
**Percentage of Healthcare Workers Vaccinated by Gender**



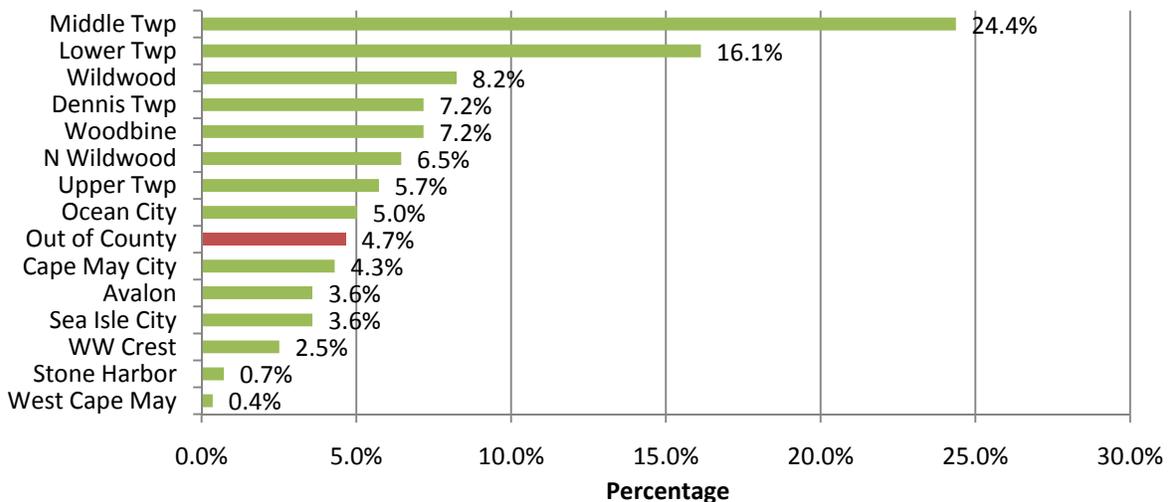
**Percentage of Healthcare Workers Vaccinated by Race**



**Percentage of Healthcare Workers Vaccinated by Ethnicity**



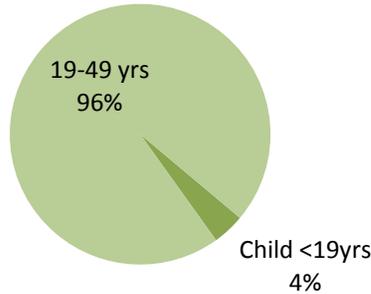
**Healthcare Workers Vaccinated by Municipality**



**Pregnant Women (n=25)**

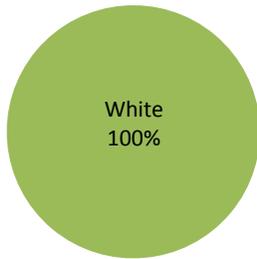
Vaccinated pregnant women were mostly between 18-49 years with 5% less than 19 years (excluding missing age); all were white. Ethnicity was consistent. Pregnant women were more likely to live in Upper Township or out of county, and less likely to live in Cape May City.

**Pregnant Women Vaccinated by Age Group**

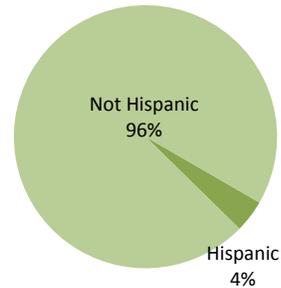


Mean age is 29.

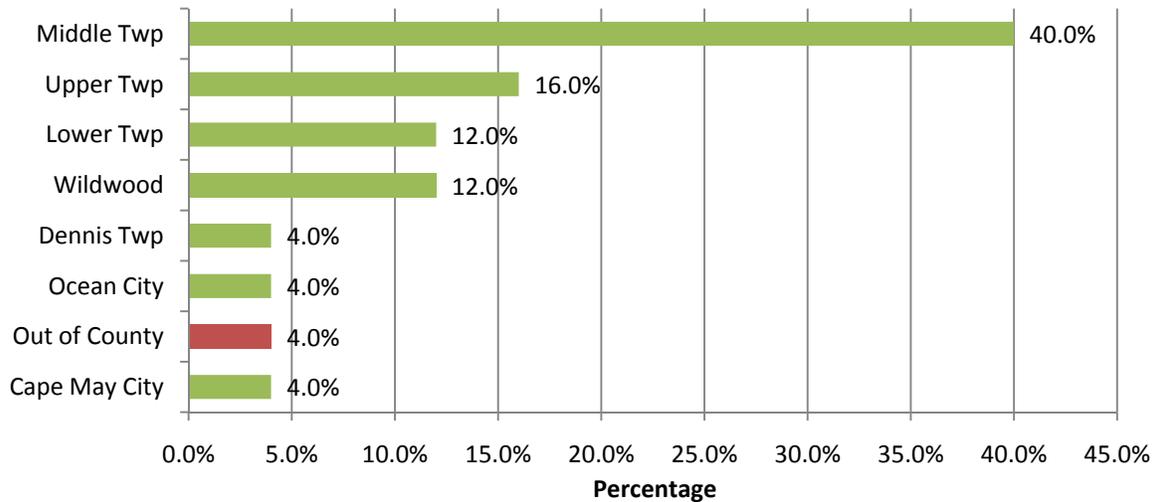
**Percentage of Pregnant Women Vaccinated by Race**



**Percentage of Pregnant Women Vaccinated by Ethnicity**



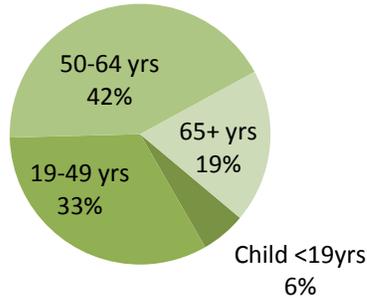
**Pregnant Women Vaccinated by Municipality**



**Household Contacts or Caregivers of Persons at High Risk for Influenza (n=561)**

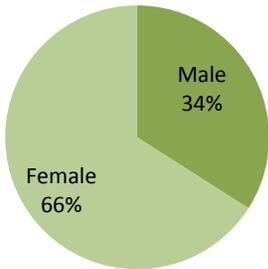
Vaccinated persons who live with or care for persons at high risk were more likely to be between 19-64 years of age and less likely to be 65 years or older; more likely to be female and non-Hispanic. Race and residency were consistent.

**HH Contacts/Caregivers by Age Group**

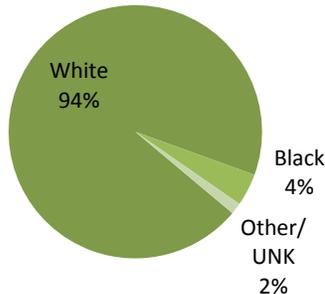


Mean age is 52 years, range 1 to 91.

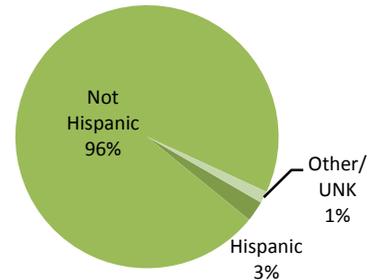
**Percentage of HH Contacts/Caregivers Vaccinated by Gender**



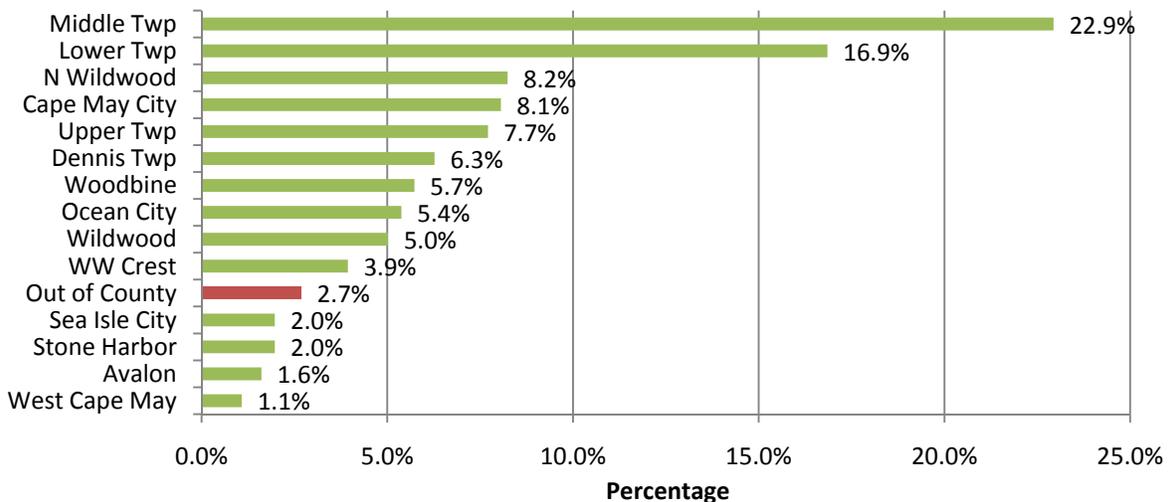
**Percentage of HH Contacts/Caregivers Vaccinated by Race**



**Percentage of HH Contacts/Caregivers Vaccinated by Ethnicity**



**Household Contacts/Caregivers Vaccinated by Municipality**

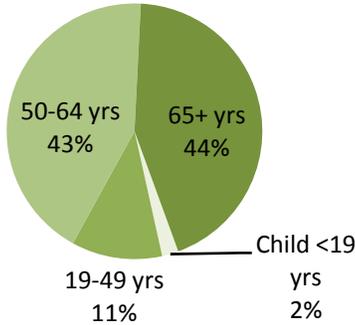


## Appendix B: Specific Information by Municipality<sup>5</sup>

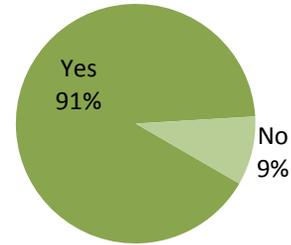
### Barrier Islands (Avalon, Stone Harbor, Sea Isle City, n=581)

Vaccinated persons living on the barrier islands were more likely to be 50 years or older and less likely to be less than 49 years; more likely to be in an ACIP-recommended vaccination group; slightly more likely to be white and male and less likely to be Hispanic.

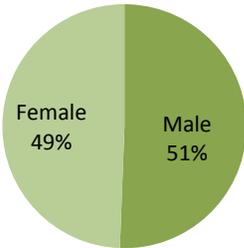
Percentage Residents Vaccinated by Age Group



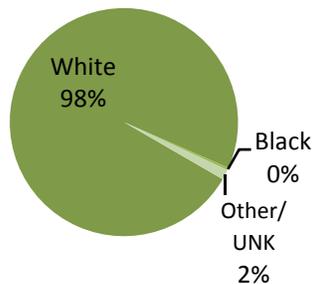
Percentage of Residents Vaccinated in ACIP Recommended Group



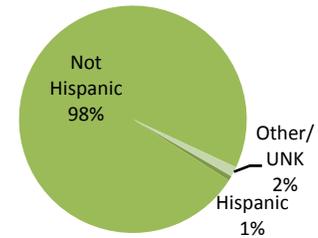
Percentage of Residents Vaccinated by Gender



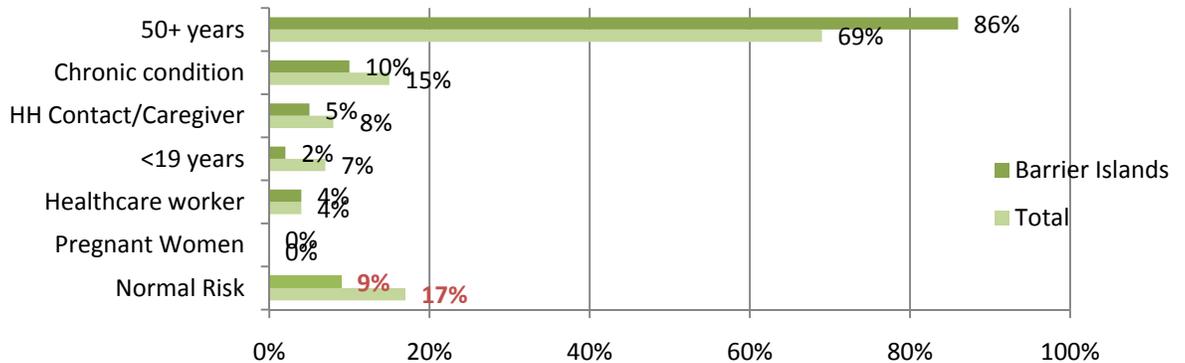
Percentage of Residents Vaccinated by Race



Percentage of Residents Vaccinated by Ethnicity



Percentage of Residents Vaccinated by ACIP Recommended Group



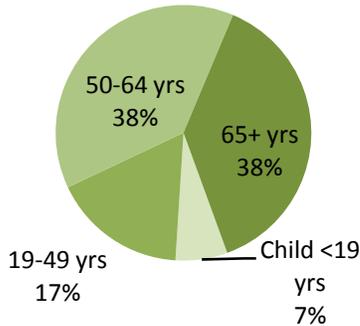
Note: Sums to greater than 100% owing to multiple risk categories for some residents.

<sup>5</sup> Individual municipalities are combined into one of seven groups, as described on each page.

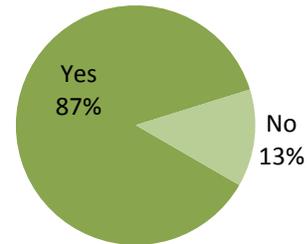
**Cape May (Cape May City, Cape May Point, West Cape May, n=843)**

Vaccinated persons living in the Cape May's were slightly more likely to be 65 years or older and were less likely to be between 19-49 years; more likely to be in an ACIP recommended group, white, and not Hispanic. Gender was consistent.

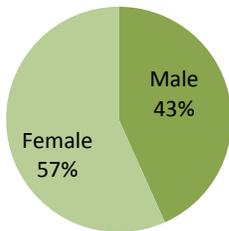
**Percentage Residents Vaccinated by Age Group**



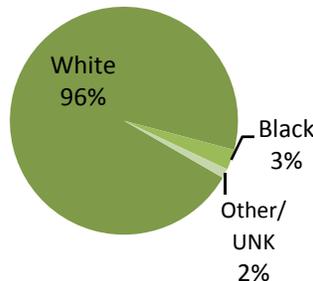
**Percentage of Residents Vaccinated in ACIP Recommended Group**



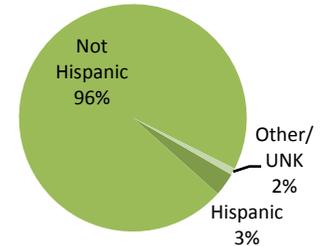
**Percentage of Residents Vaccinated by Gender**



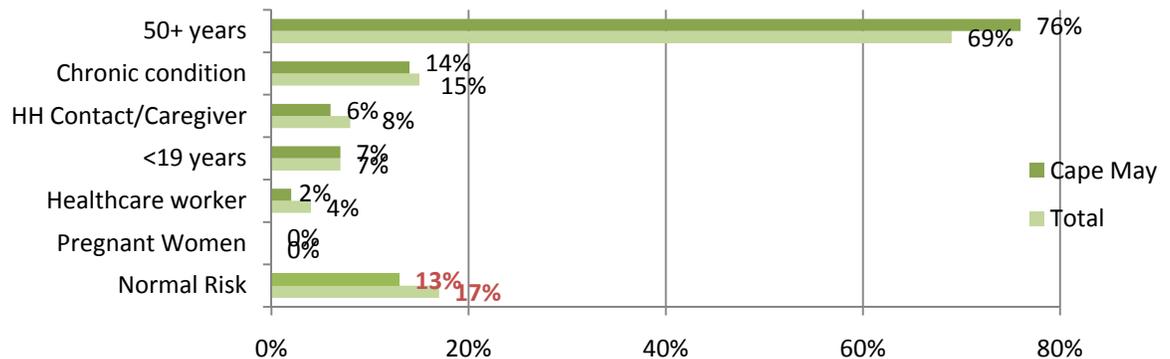
**Percentage of Residents Vaccinated by Race**



**Percentage of Residents Vaccinated by Ethnicity**



**Percentage of Residents Vaccinated by ACIP Recommended Group**

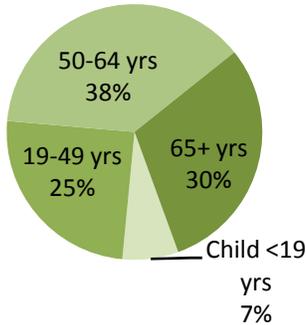


Note: Sums to greater than 100% owing to multiple risk categories for some residents.

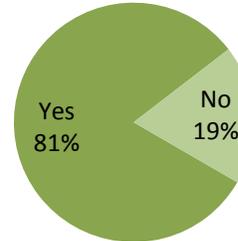
## Dennis/Middle Townships (n=2,007)

Vaccinated persons living in Dennis/Middle Township were slightly less likely to be in an ACIP-recommended vaccination group and more likely to be Hispanic. Age, gender, and race were consistent.

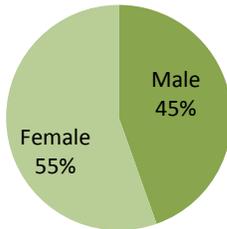
**Percentage Residents Vaccinated by Age Group**



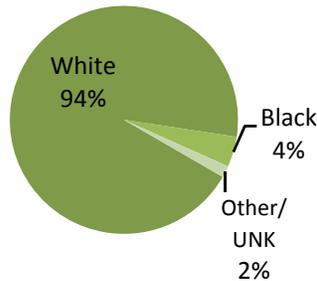
**Percentage of Residents Vaccinated in ACIP Recommended Group**



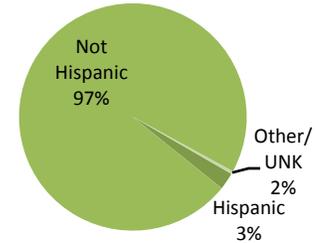
**Percentage of Residents Vaccinated by Gender**



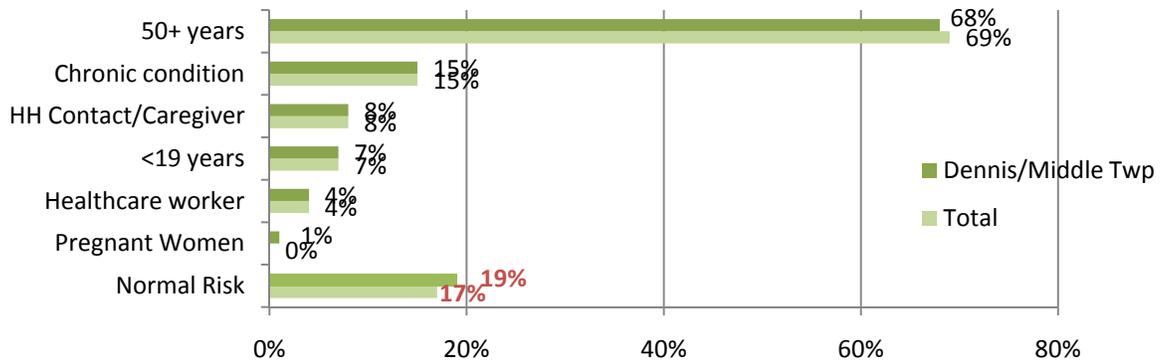
**Percentage of Residents Vaccinated by Race**



**Percentage of Residents Vaccinated by Ethnicity**



**Percentage of Residents Vaccinated by ACIP Recommended Group**

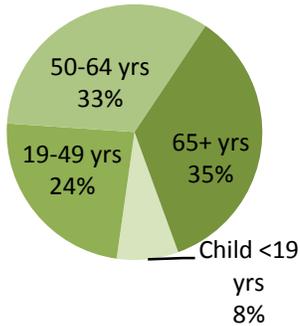


Note: Sums to greater than 100% owing to multiple risk categories for some residents.

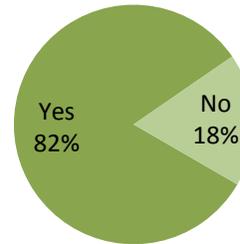
## Lower Township (n=1,203)

Vaccinated persons living in Lower Township were slightly more likely to be white and female and less likely to be black. ACIP recommended vaccination group, age, and Hispanic ethnicity were consistent.

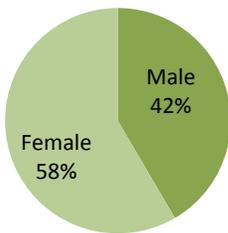
**Percentage Residents Vaccinated by Age Group**



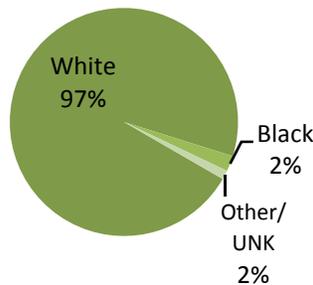
**Percentage of Residents Vaccinated in ACIP Recommended Group**



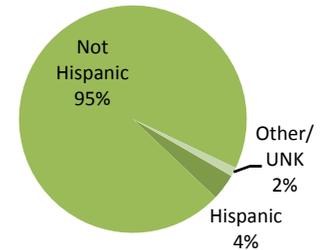
**Percentage of Residents Vaccinated by Gender**



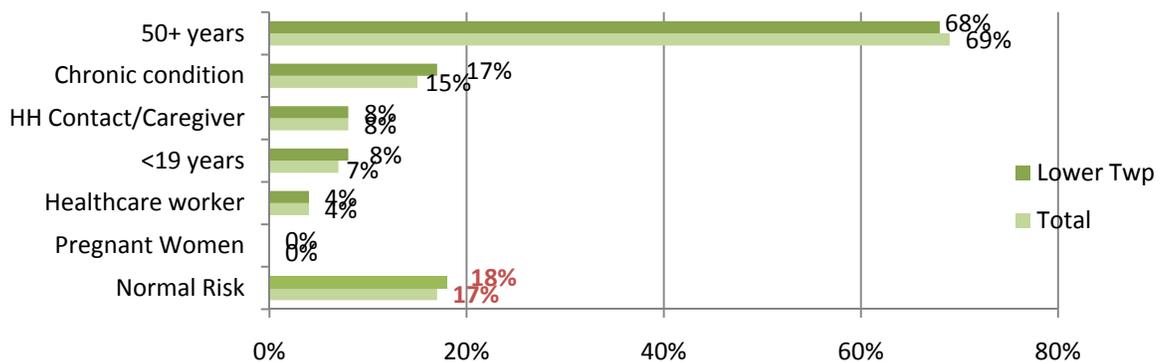
**Percentage of Residents Vaccinated by Race**



**Percentage of Residents Vaccinated by Ethnicity**



**Percentage of Residents Vaccinated by ACIP Recommended Group**

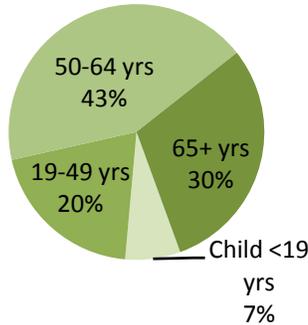


Note: Sums to greater than 100% owing to multiple risk categories for some residents.

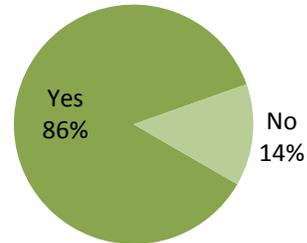
**Ocean City (n=334)**

Vaccinated persons living in Ocean City were slightly more likely to be in an ACIP-recommended vaccination group; more likely to be between 50-64 years, white, and not Hispanic. Gender was consistent.

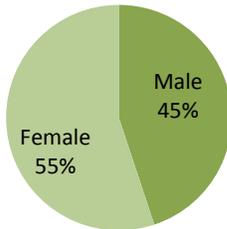
**Percentage Residents Vaccinated by Age Group**



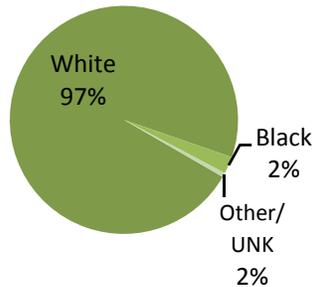
**Percentage of Residents Vaccinated in ACIP Recommended Group**



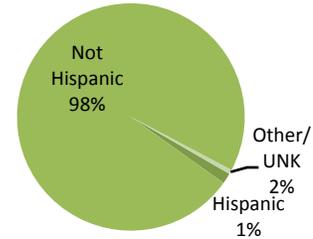
**Percentage of Residents Vaccinated by Gender**



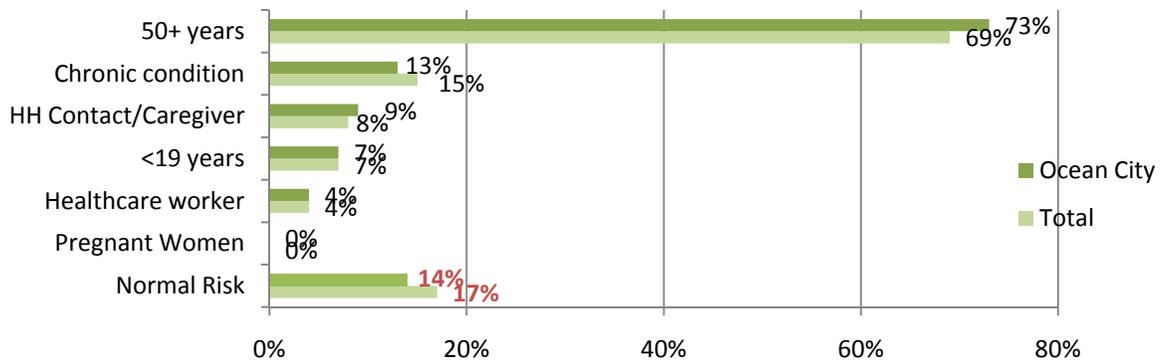
**Percentage of Residents Vaccinated by Race**



**Percentage of Residents Vaccinated by Ethnicity**



**Percentage of Residents Vaccinated by ACIP Recommended Group**

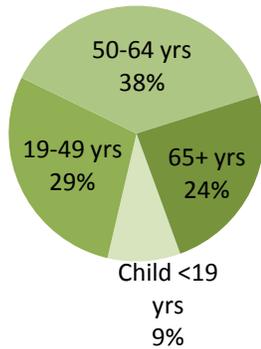


Note: Sums to greater than 100% owing to multiple risk categories for some residents.

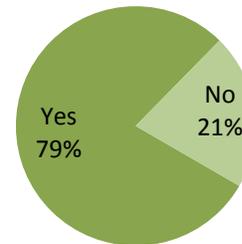
## Upper Township/Woodbine (n=667)

Vaccinated persons living in Upper Township/Woodbine were less likely to be in an ACIP-recommended vaccination group; less likely to be 65 years or older and more likely to be less than 50 years; slightly more likely to be white. Gender and Hispanic ethnicity were consistent.

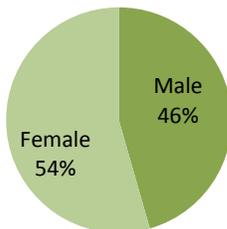
**Percentage Residents Vaccinated by Age Group**



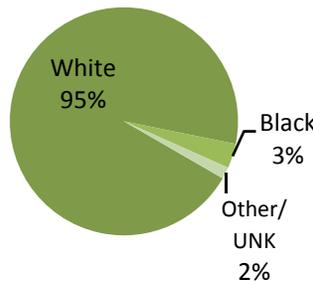
**Percentage of Residents Vaccinated in ACIP Recommended Group**



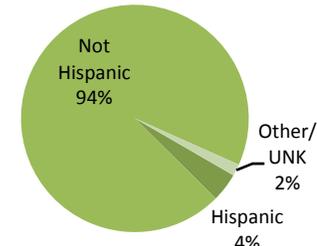
**Percentage of Residents Vaccinated by Gender**



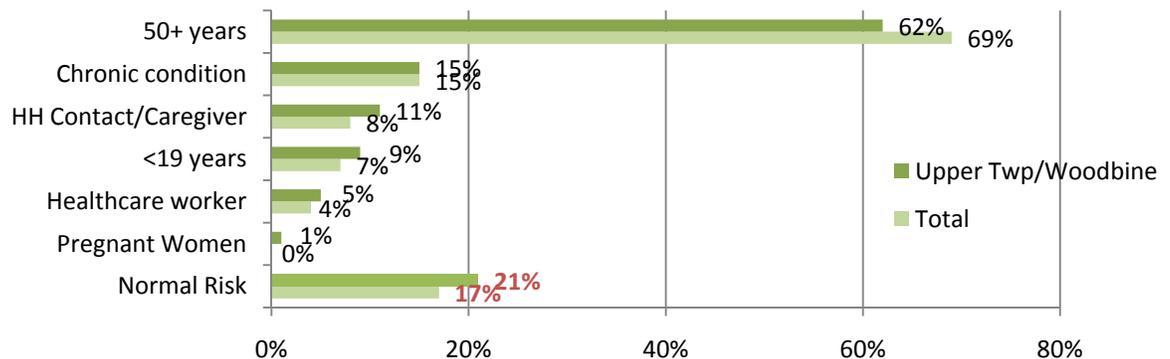
**Percentage of Residents Vaccinated by Race**



**Percentage of Residents Vaccinated by Ethnicity**



**Percentage of Residents Vaccinated by ACIP Recommended Group**

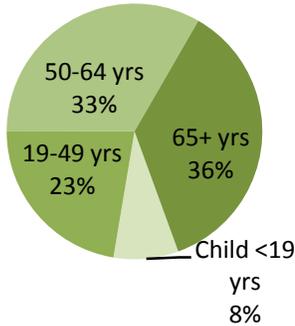


Note: Sums to greater than 100% owing to multiple risk categories for some residents.

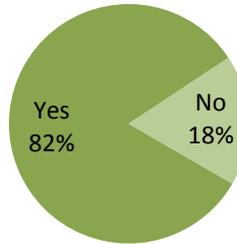
**Wildwoods (North Wildwood, West Wildwood, Wildwood, Wildwood Crest, n=1,299)**

Vaccinated persons living in the Wildwoods were slightly more likely to be 65 years or older. ACIP-recommended vaccination group, gender, race, and Hispanic ethnicity were consistent.

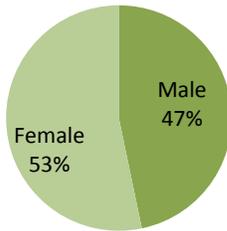
**Percentage Residents Vaccinated by Age Group**



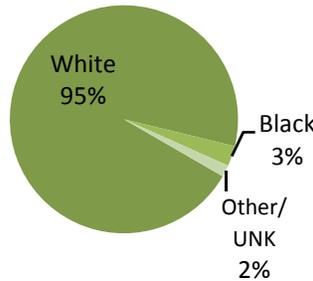
**Percentage of Residents Vaccinated in ACIP Recommended Group**



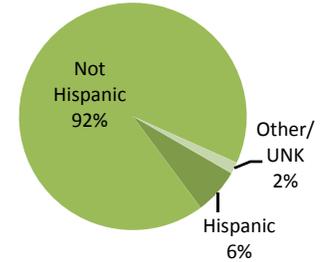
**Percentage of Residents Vaccinated by Gender**



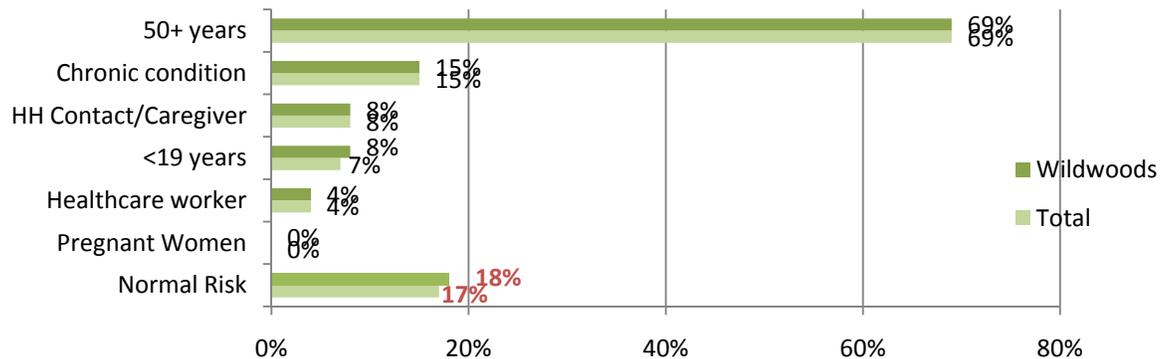
**Percentage of Residents Vaccinated by Race**



**Percentage of Residents Vaccinated by Ethnicity**



**Percentage of Residents Vaccinated by ACIP Recommended Group**



Note: Sums to greater than 100% owing to multiple risk categories for some residents.