

PINELLAS COUNTY COMMUNITY HEALTH ACTION TEAM

October 20, 2016



SPONSORED BY:
Florida Department of Health in Pinellas County

THE HPV EPIDEMIC

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OBJECTIVES

1. Describe the burden of HPV disease.
2. Identify the importance of the HPV Vaccination for cancer prevention
3. Explain the importance of HPV vaccination for cancer prevention and the rationale for vaccinating boys and girls at ages 11-13.
4. Describe local efforts to improve HPV vaccination rates.

Background

Human papillomaviruses are small, double-stranded DNA viruses that infect the epithelium; there are more than 120 types

HPV is the most common STD infection in the US

- Among sexually active women:
 - > 50% have been infected with one or more genital types
 - 15% have current infection (50-75% high-risk)

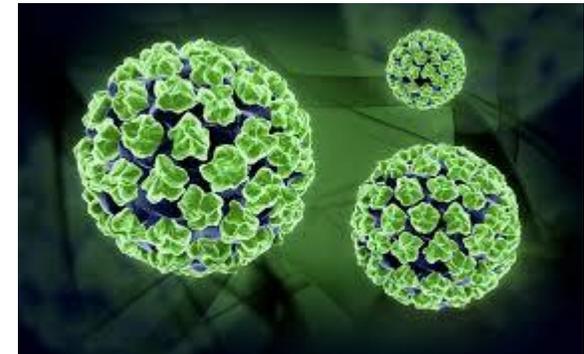
Transmission:

- Direct contact, usually sexual
- Non-sexual: rare

More than 120 HPV Types

40 HPV Types infect genitals, mouth, and throat

Infection is usually transient and not associated with symptoms – 90% of infections clear within 2 years



HPV – Epidemiology

Reservoir:

- Humans are the only natural reservoir of HPV

Transmission:

- Direct contact, usually sexual with someone who is infected with an Human papillomavirus
- Although rare, nonsexual routes of genital HPV transmission have occurred (*transmission from mom to newborn at the time of birth*)

Communicability:

- Presumed to be high due to the large number of infections estimated each year

Risk Factors:

- Primarily related to sexual behavior, including lifetime partners and recent sex partners

HPV – Clinical Features

Most HPV infections are asymptomatic and does not cause clinical disease.

Clinical manifestations of HPV infection include:

- Anogenital Warts
- Recurrent respiratory papillomatosis
- Cervical Cancer Precursors (*cervical intraepithelial neoplasia*)
- Cancer: cervical, anal, vaginal, vulvar, penile, and oropharyngeal



Statistics

79 Million are infected with HPV in the US

14 million people become infected each year

Majority of people who are sexually active will acquire HPV some time in their life

Highest incidence is among those 15-24 years of age



HPV Types Differ in their Disease Associations

~40 Types

Mucosal sites of infection

Cutaneous sites of infection

~ 80 Types

High risk (oncogenic)
HPV 16, 18

Low risk (non-oncogenic)
HPV 6, 11

Cervical Cancer
Anogenital Cancers
Oropharyngeal Cancer
Cancer Precursors
Low Grade Cervical Disease

Genital Warts
Laryngeal Papillomas
Low Grade Cervical Disease

“Common”
Hand and Foot
Warts

HPV & Cervical Cancer

- ▶ 1960s:
 - ▶ Epidemiologic studies establish a relationship between cervical cancer and sexual behavior.
- ▶ 1980s:
 - ▶ Cervical cancer cells were demonstrated to contain HPV DNA.
- ▶ 1990s:
 - ▶ Publication of studies showing a consistent association between HPV and cervical cancer.
- ▶ 2006:
 - ▶ First HPV vaccine introduced

Statistics

HPV-associated Cancers:

- Estimated 17,600 women in US
- 9,300 men

Cervical Cancer

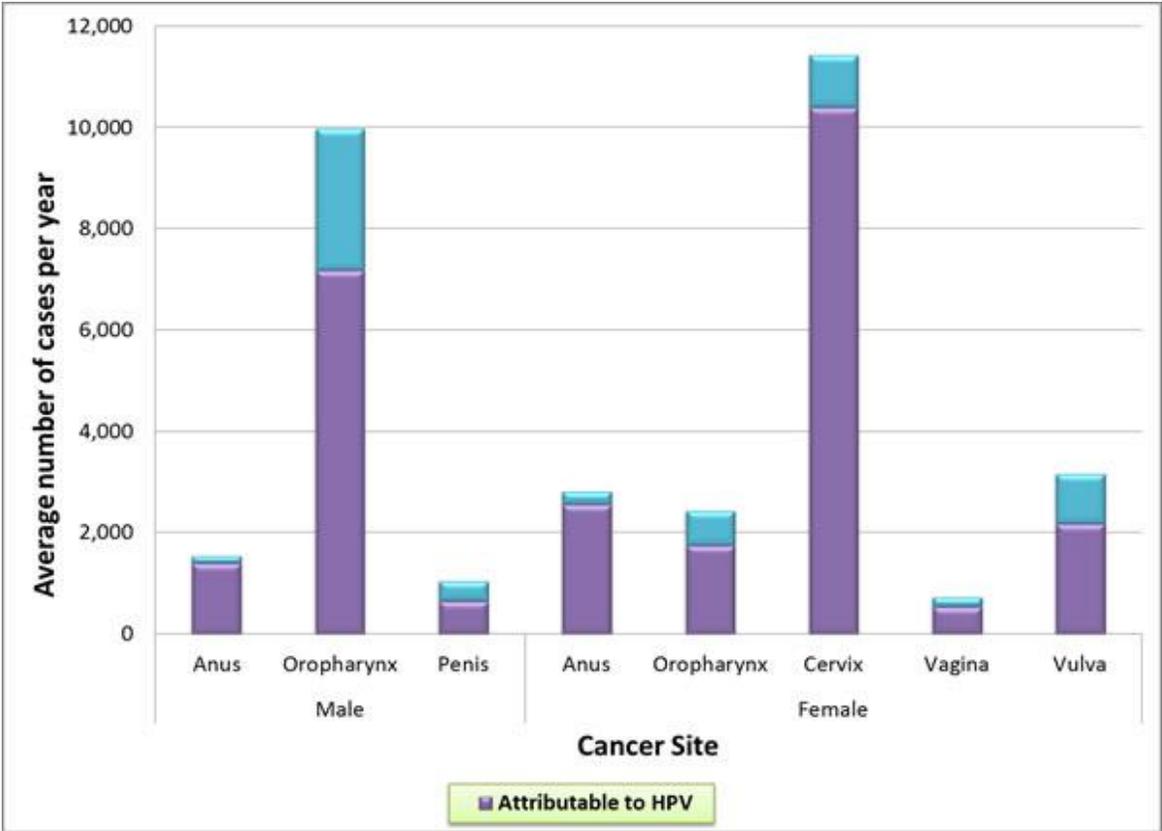
- Most common in women
- More 11,000 cases annually
- 4,400 deaths annually

Oropharyngeal Cancer

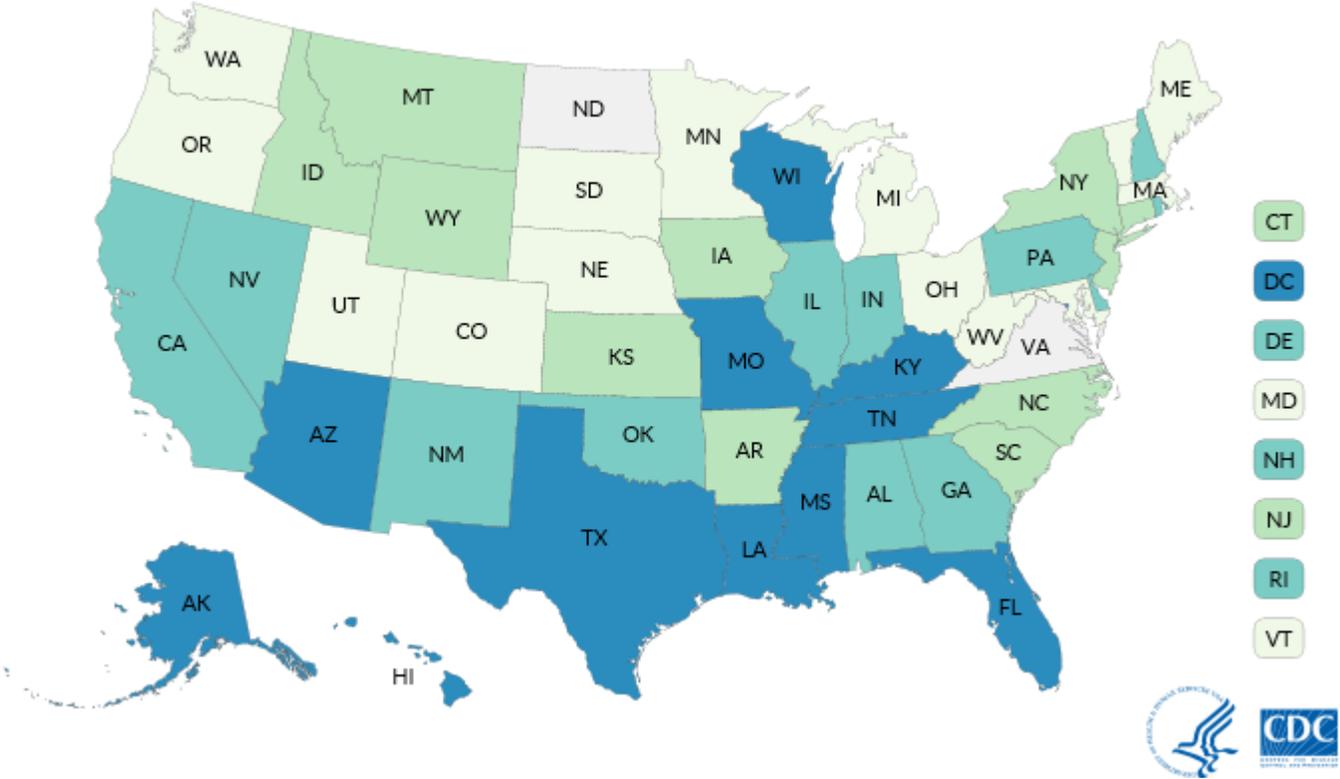
- Most common in men
- 7,200 men each year



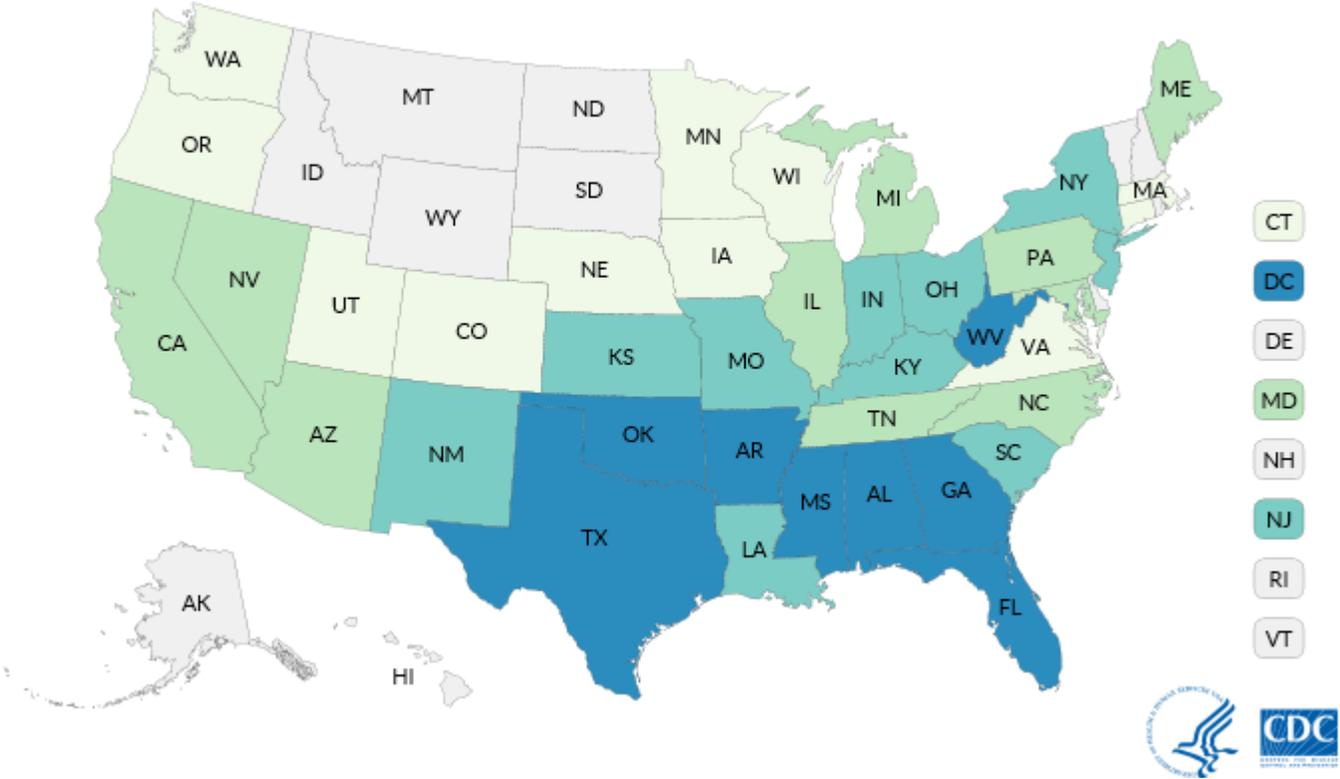
HPV-Associated Cancers



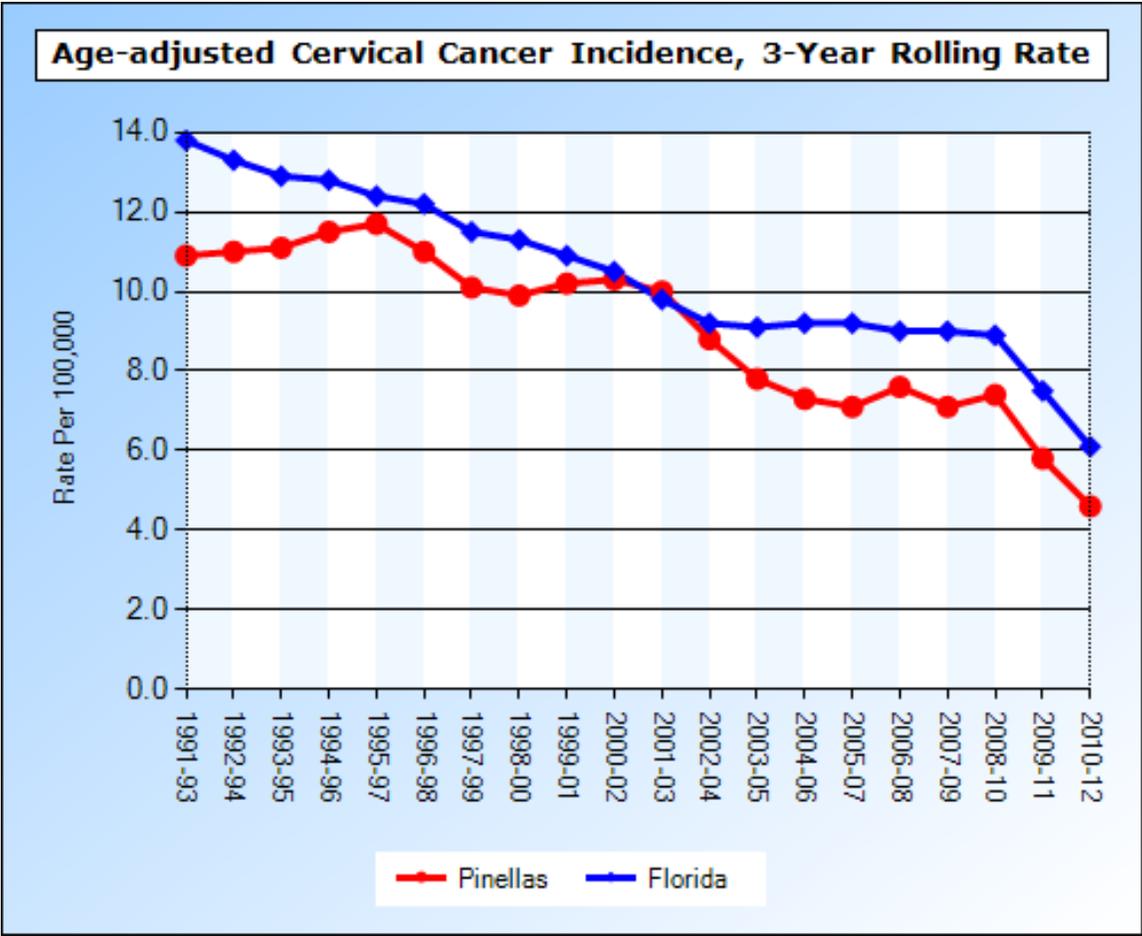
Incidence of Cervical Cancer by State



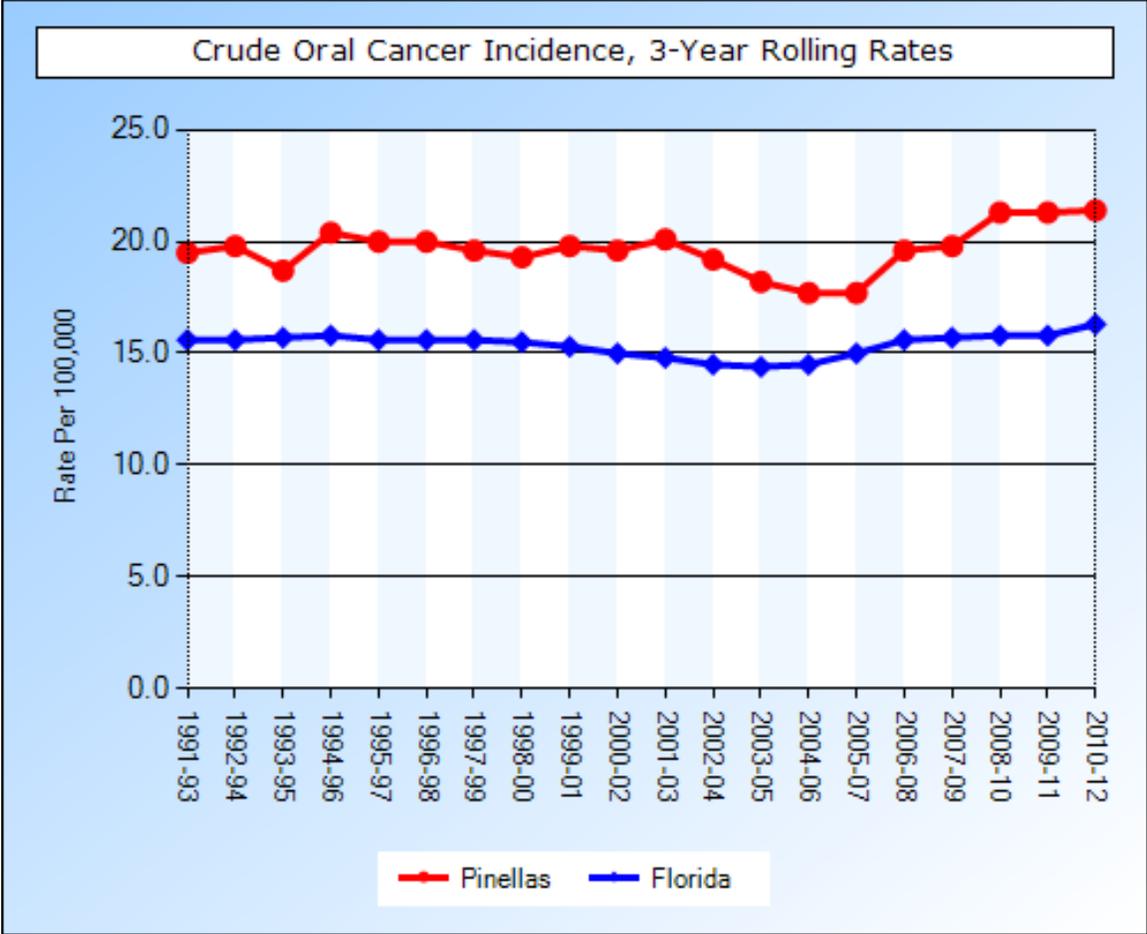
Deaths from Cervical Cancer by State



Incidence of Cervical Cancer



Incidence of Oral Cancer



Anal Cancer Statistics

New anal cancer cases in U.S. (2013): 7060

Deaths from anal cancer in U.S. (2013): 880

0.4% of all cancers diagnosed in the U.S. in 2013

Anal Cancer rates have increased by ~2%/yr since the 1970's

Incidence of SCCA among men in general population (~0.8/100K) vs HIV-infected MSM (~70/100K)

NCI 2013; Chiao EY. Clin Infect Dis 2006;43:223-33

<http://www.cancer.org/acs/groups/content/@epidemiologysurveillance/documents/document/acspc-037124.pdf>

<http://seer.cancer.gov/statfacts/html/anus.htm>



HPV & Cervical Cancer Prevention

HPV transmission is reduced with the use of physical barriers such as condoms.

Most cases and deaths from cervical cancer can be prevented through detection of precancerous changes within the cervix using the Pap test.



HPV Vaccines

Quadrivalent HPV vaccine (HPV4); (*Gardasil, Merck*):

- FDA approved in June, 2006
- Females and males 9 through 26 years
- Contains types 16 and 18 (high risk) and types 6 and 11 (low risk)

Bivalent HPV vaccine (HPV2); (*Cervarix, GlaxoSmithKline*):

- FDA approved in October, 2009
- Females 9 through 25 years of age; Not approved for males
- Contains types 16 and 18 (high risk)

HPV Vaccines *cont'd*

9-valent HPV vaccine (HPV9); (*Gardasil, Merck*):

- FDA approved in December, 2014
- Females: 13 to 26 years; Males: ~~13 to 21 years~~ **13 to 26 years**
- Contains the 4 types included in HPV4 and adds types: 31, 33, 45, 51 and 58
- Increases coverage for up to 90% of HPV types that cause cervical cancer



HPV Vaccines *cont'd*

HPV2, HPV4, and HPV9 all protect against HPV 16 and 18, two high risk types that cause about 66% of cervical cancers and the majority of other HPV-attributable cancers in the U.S.

HPV4 and HPV9 also protect against HPV 6 and 11, types that cause anogenital warts.

HPV9 targets five additional cancer causing types, which account for about 15% of cervical cancers.

HPV Vaccine Recommendations

Advisory Committee on Immunization Practices (ACIP) recommends:

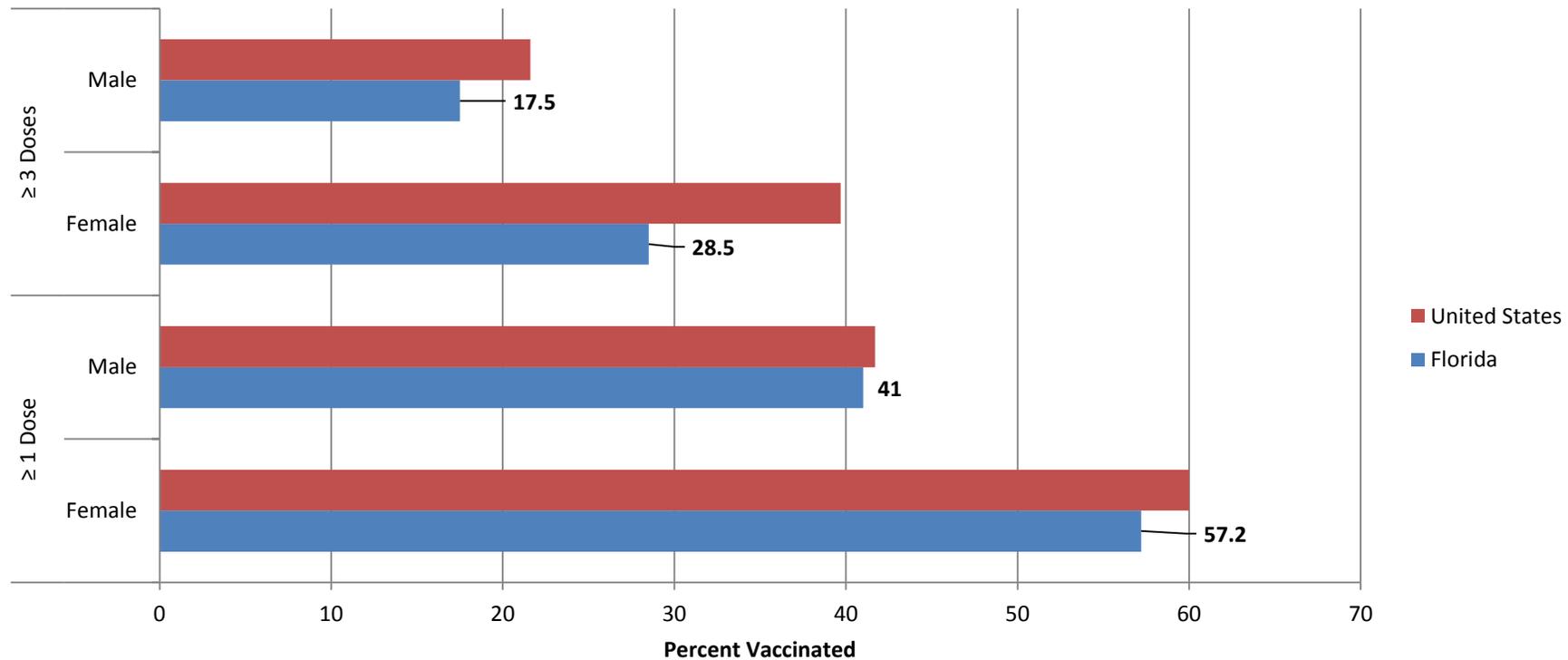
- Routine HPV vaccination be initiated at age **11 or 12 years**; series can begin as early 9 years.
- Recommended vaccination for females and males aged 13 through 26 years who have not been vaccinated

Administration:

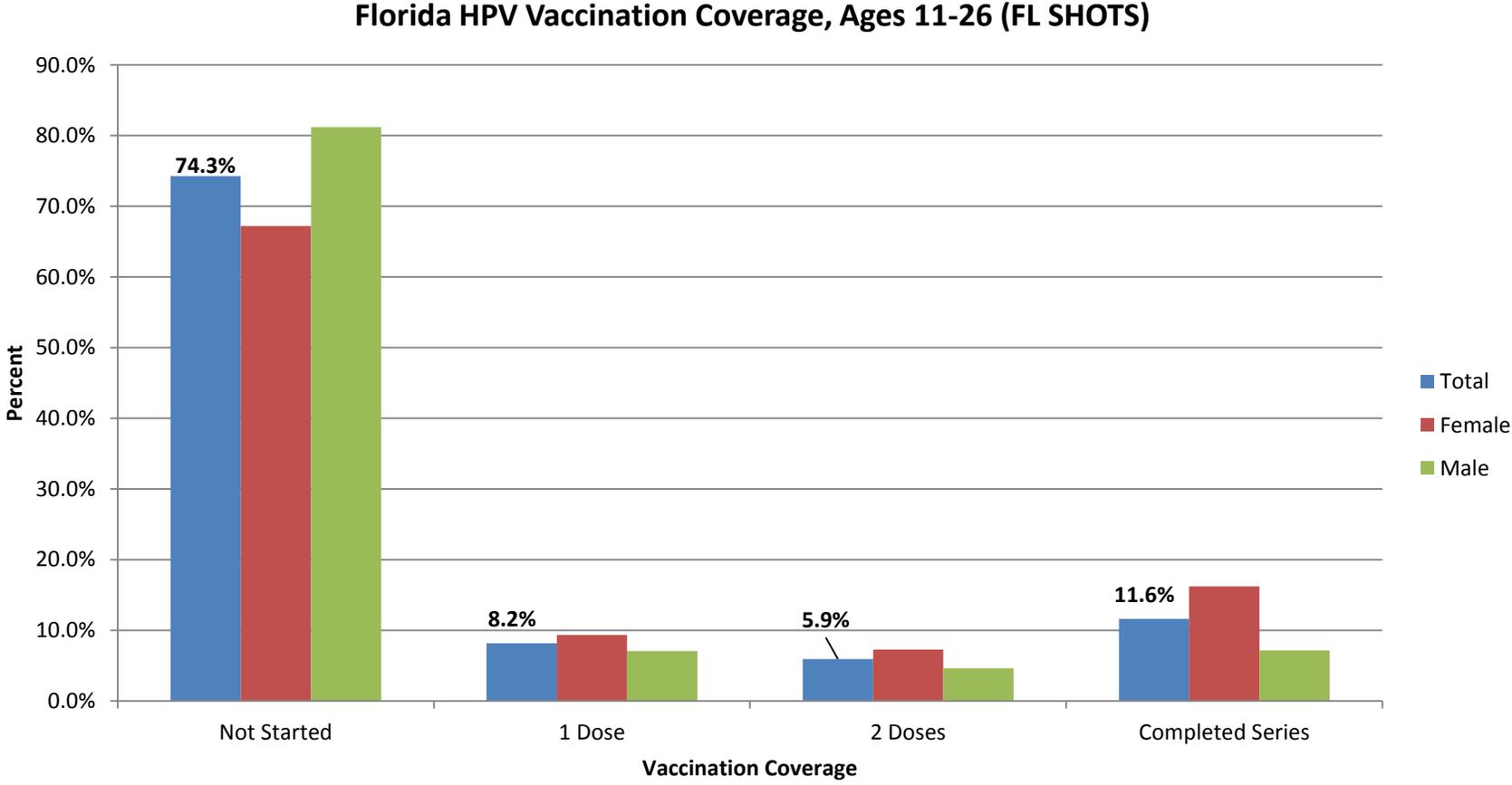
- HPV vaccines were initially approved as a 3-dose series.
- **As of October 20, 2016, CDC recommends that 11- to 12-year-olds receive TWO doses of HPV vaccine at least six months.**
- **Teens and young adults who start the series later, at ages 15 through 26 years, will continue to need three doses of HPV.**

NIS Data: Estimated Vaccination Coverage Among Adolescents Aged 13-17

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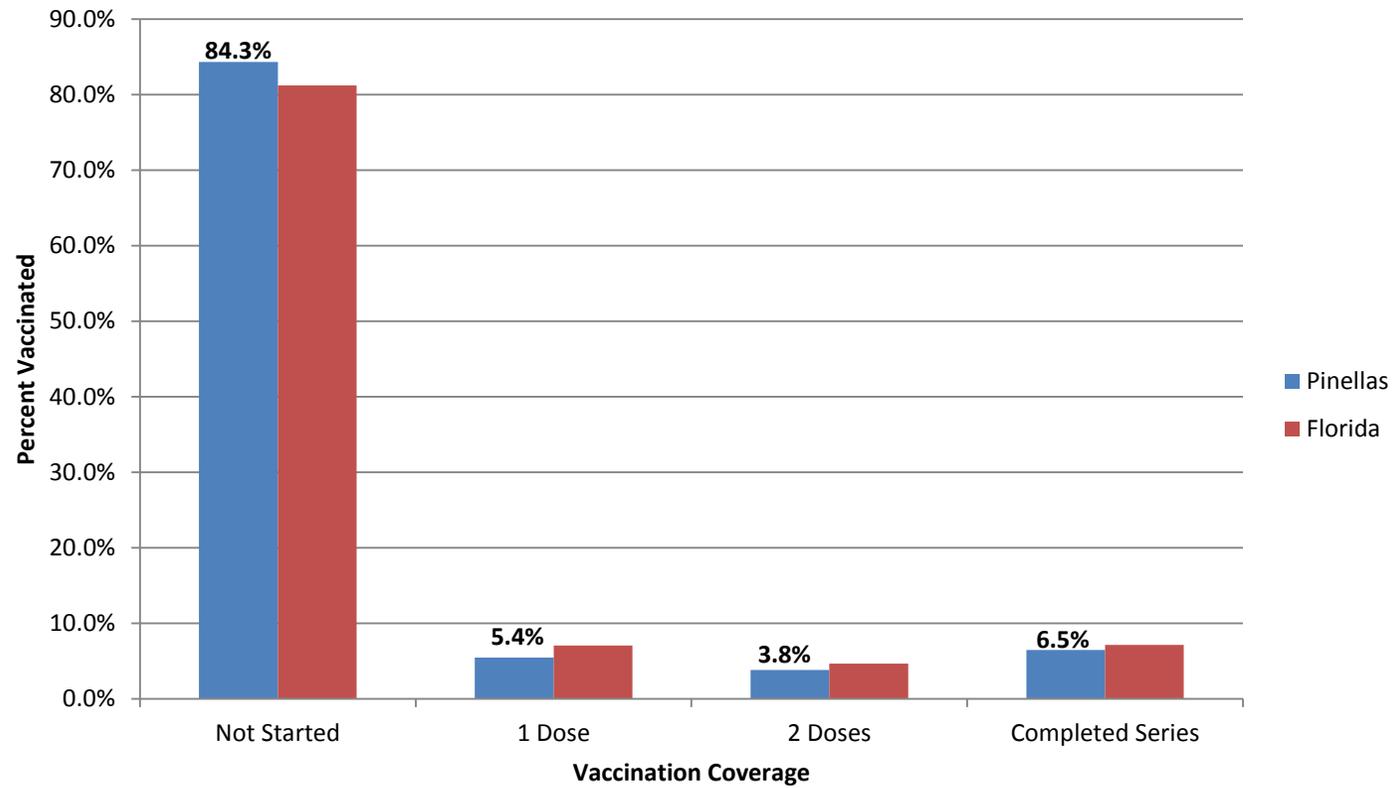


Florida HPV Vaccination Coverage Among those Aged 11-26 (FL SHOTS)

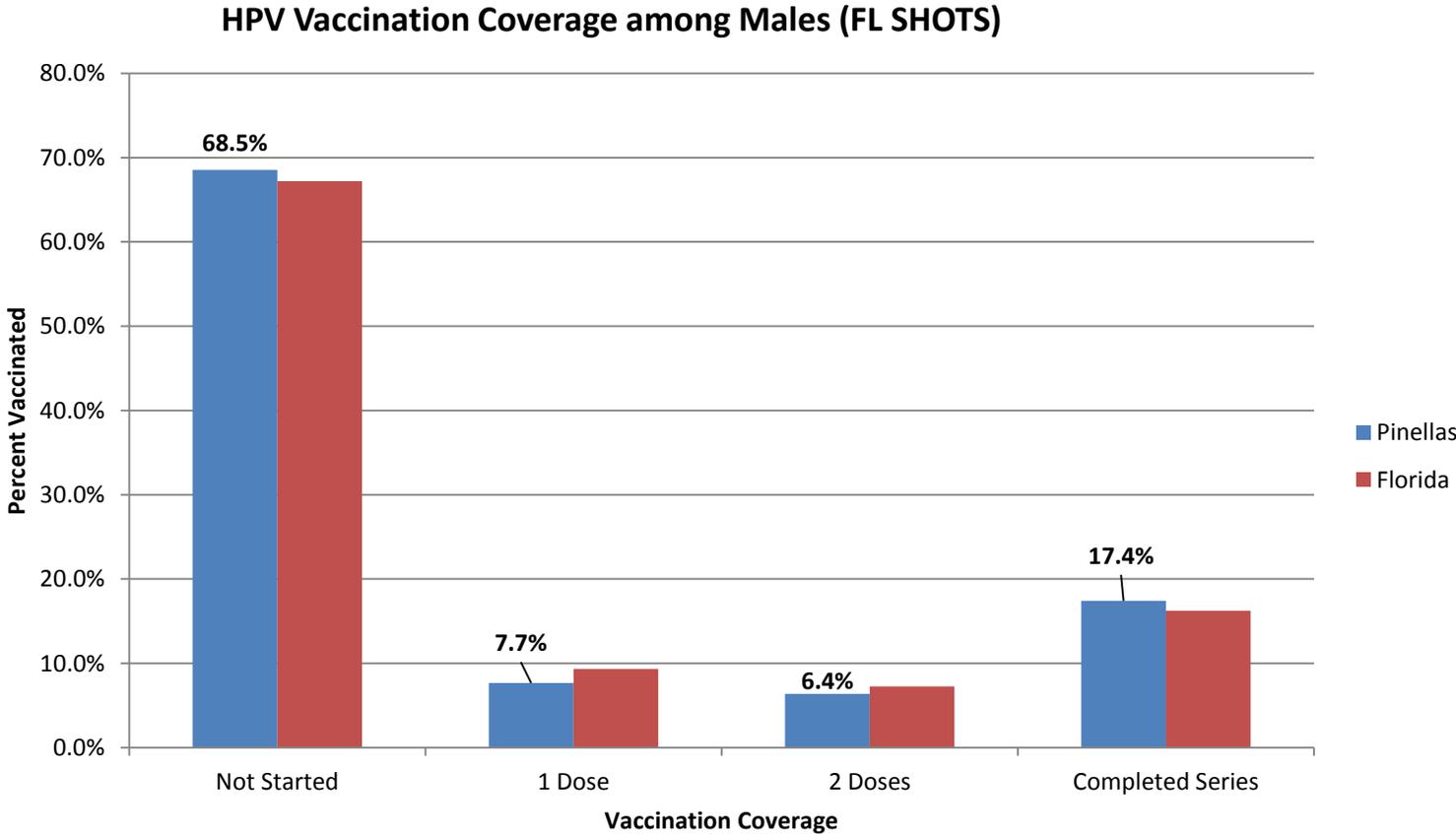


Pinellas HPV Vaccination Coverage Males Aged 11-26 (FL SHOTS) *September 2015*

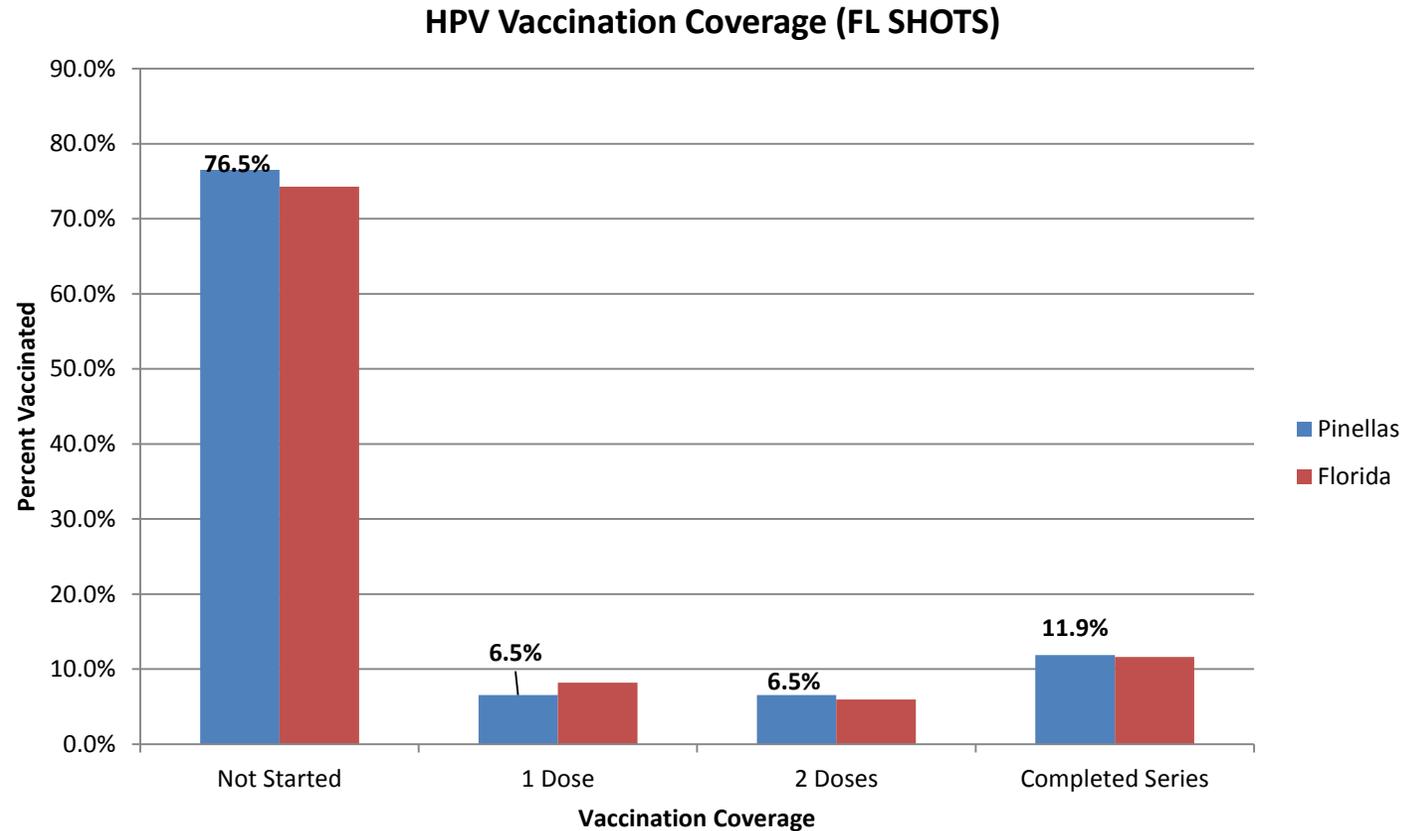
HPV Vaccination Coverage among Females (FL SHOTS)



Pinellas HPV Vaccination Coverage Females Aged 11-26 (FL SHOTS) *September 2015*



Pinellas HPV Vaccination Coverage those Aged 11-26 (FL SHOTS) *September 2015*



Pinellas County



- Florida is ranked 5th in the nation for cervical cancer incidence rates with 9 per 100,000. Pinellas County has among the highest cervical cancer rates in Florida with 7.6 per 100,000.
- At the start of campaign in Pinellas County, 6.5% of males and 17.4% of females between the ages 11-26 have completed the three-dose series.
- **2016-2018 Strategic Plan Indicator**: Increase percent of those eligible for HPV vaccine and reported through FL Shots who have completed the 1st HPV shot from 6.5% (2014) to 7.96% by Dec. 31, 2018.



Pinellas HPV Campaign

2016 Florida HPV Campaign “Be HPV Free”



Florida Immunization Partnership



Florida Chapter
American Academy of Pediatrics



Florida Immunization Summit - #BEHPVFREEFL

Supporting Local Health Departments to
Increase Human Papillomavirus Vaccination Rates

NACCCHO

National Association of County & City Health Officials



Market Use of State Immunization Information Systems (IIS)

Objective 1: *By December 31, 2016, DOH-Pinellas will collaborate with IIS field staff to develop outreach plan for marketing IIS to 40% of local providers.*

Objective 2: *By April 2017, develop training, education and the delivery package on Florida's IIS - FLSHOTS for providers and parents in Pinellas County*

Objective 3: *By March 2017, DOH-Pinellas will provide a minimum of 3 outreach/educational sessions on use of IIS to reach 40% of local providers*

Objective 4: *By September 2018, DOH-Pinellas will increase local provider use of IIS by 40%.*

Identify and Conduct Effective Outreach and Educational Activities

Objective 1: By July 1, 2016, start assessing training and education plan/package needs of Pinellas County providers and parents

Objective 2: By June 30, 2017, develop and deliver training/education package to healthcare professionals in Pinellas County

Objective 3: By June 30, 2017, develop and deliver training/education package to parents in Pinellas County

Objective 4: By November 30, 2016 assess adolescent programs and services specifically for those aged 11-12 years in Pin Co to increase opportunities for education and outreach

Develop/Adopt/Adapt Consistent Messaging plan

Objective 1: *By Sept 30, 2016, define the target audience and identify appropriate messaging for each sub group*

Objective 2: *By March 30, 2017, identify specific media strategies within print and broadcast including cost estimates for each and vendor info.*

Objective 3: *By April 30, 2018, engage youth in the development of a peer to peer messaging plan*

Objective 4: *By June 30, 2017, using the existing HPV Toolkit, expand the messaging plan to include specific media outlets, target quantities and timeframes, for medical professionals and the communities*

HPV CANCER PREVENTION

1 HPV VACCINE IS CANCER PREVENTION
HPV vaccine protects against HPV types that most commonly cause anal, cervical, oropharyngeal, penile, vaginal, and vulvar cancers.

Every year in the U.S., 27,000 people get cancer caused by HPV.



That's 1 person every 20 minutes of every day, all year long.

Most of these cancers can be prevented by HPV vaccine.

2 HPV VACCINE IS RECOMMENDED AT THE SAME TIME AS OTHER TEEN VACCINES

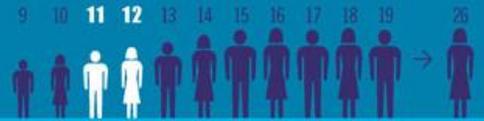
Preteens need three vaccines at 11 or 12. They protect against whooping cough, cancers caused by HPV, and meningitis.



Rx
Vaccines for your 11-12 year old:
✓ Tdap
✓ HPV
✓ Meningococcal

3 HPV VACCINE IS BEST AT 11-12 YEARS

Preteens have a higher immune response to HPV vaccine than older teens.



While there is very little risk of exposure to HPV before age 13, the risk of exposure increases thereafter.

Parents and healthcare professionals are the key to protecting adolescents from HPV cancers.

VACCINATE YOUR 11-12 YEAR OLDS.

www.cdc.gov/vaccines/teens



Data Update – As of September 2016

Males 11 -26 years

1 dose = 7% → 29% ↑

2 dose = 5% → 31% ↑

Completed = 9% → 38% ↑

Females 11 -26 years

1 dose = 9% → 16% ↑

2 dose = 7% → 9% ↑

Completed = 21% → 21% ↑



Completed 1st Dose of HPV Vaccine:

6.5% → 8% = 23% ↑

Thank you!

FOR MORE INFORMATION ON HPV VISIT: [HTTP://WWW.CDC.GOV/HPV/](http://www.cdc.gov/hpv/)



Community Health Improvement Plan

- **Review/approve 2016-17 action plans**
- **“If you could know one thing about the community...”**
- **Objective BH 1.3.1 – Suicide data**
- **Objective HCE 1.1.1 – Health in All Policies**

If you could know one thing about the community that you don't know now, what would it be?

- What can we do to improve continuity of care for kids – to better link medical and social resources?
- More specific data on fruit and vegetable consumption; for example, where do SNAP recipients buy their produce?
- What do *patients* want when it comes to health information technology? We often discuss this from a provider perspective but haven't necessarily asked patients.
- Data that would allow us to target specific neighborhoods with interventions like teen pregnancy/infant mortality prevention, versus taking a blanket approach.

If you could know one thing about the community that you don't know now, what would it be?

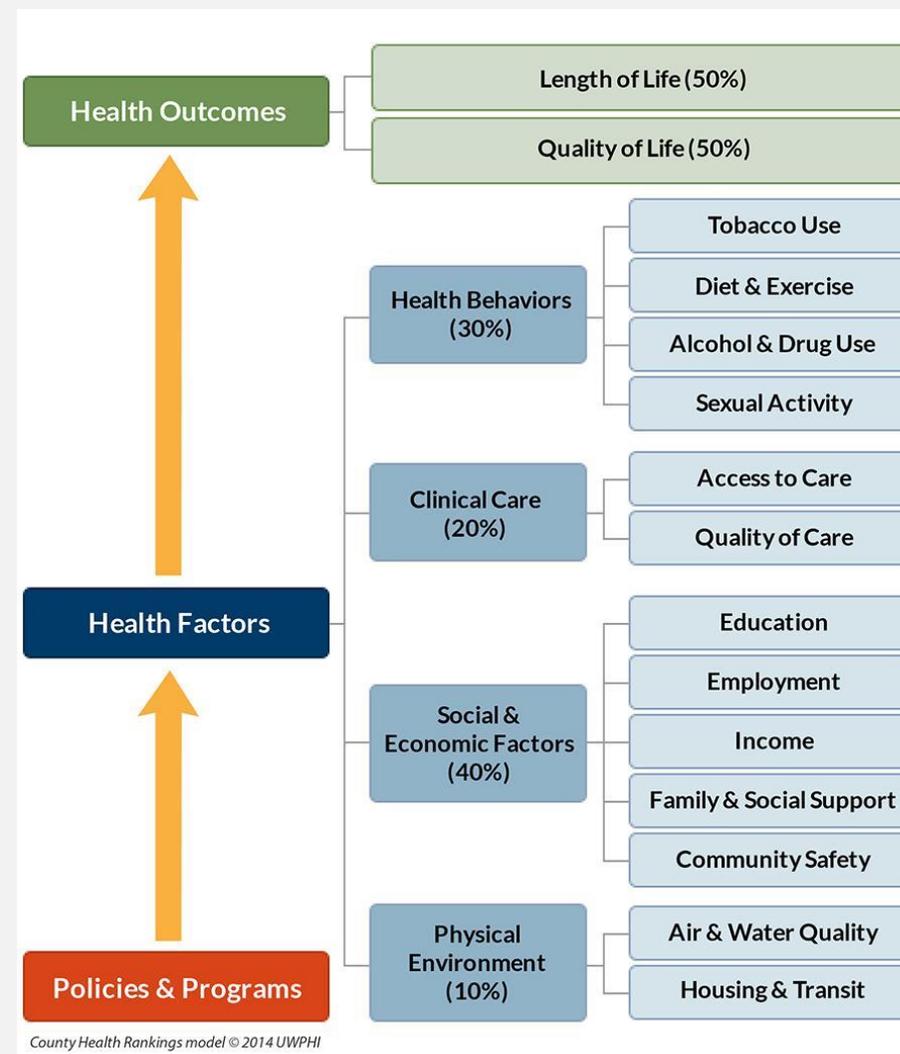
- Data about infant mortality and STDs on a zip code level, as well as inventory of peer education in these issue areas.
- Better understanding of why ADAP patients with HIV have such poor pickup rates – is it transportation? Also information on code enforcement for healthy houses, which is currently difficult to collect because Pinellas has so many municipalities.
- A more scientific way (cost-savings, etc.) to identify priority areas; currently, this selection is very subjective.
- A better understanding of true predictors of health status: what can we address that will have the most overall impact?

Community Health Improvement Plan

- ✓ **Review/approve 2016-17 action plans**
- ✓ **“If you could know one thing about the community...”**
 - **Objective BH 1.3.1 – Suicide data**
 - **Objective HCE 1.1.1 – Health in All Policies (and Public Health 3.0)**

Health in All Policies (HiAP)

- HiAP is a **strategy** that encourages local government leaders to **consider health when making decisions that affect constituents.**
- The goal of HiAP is to ensure that **leaders are informed about the health consequences of various policy options,** and that they consider these consequences – alongside other important factors such as fiscal or environmental impact – when creating policies that affect the community.



Public Health 3.0

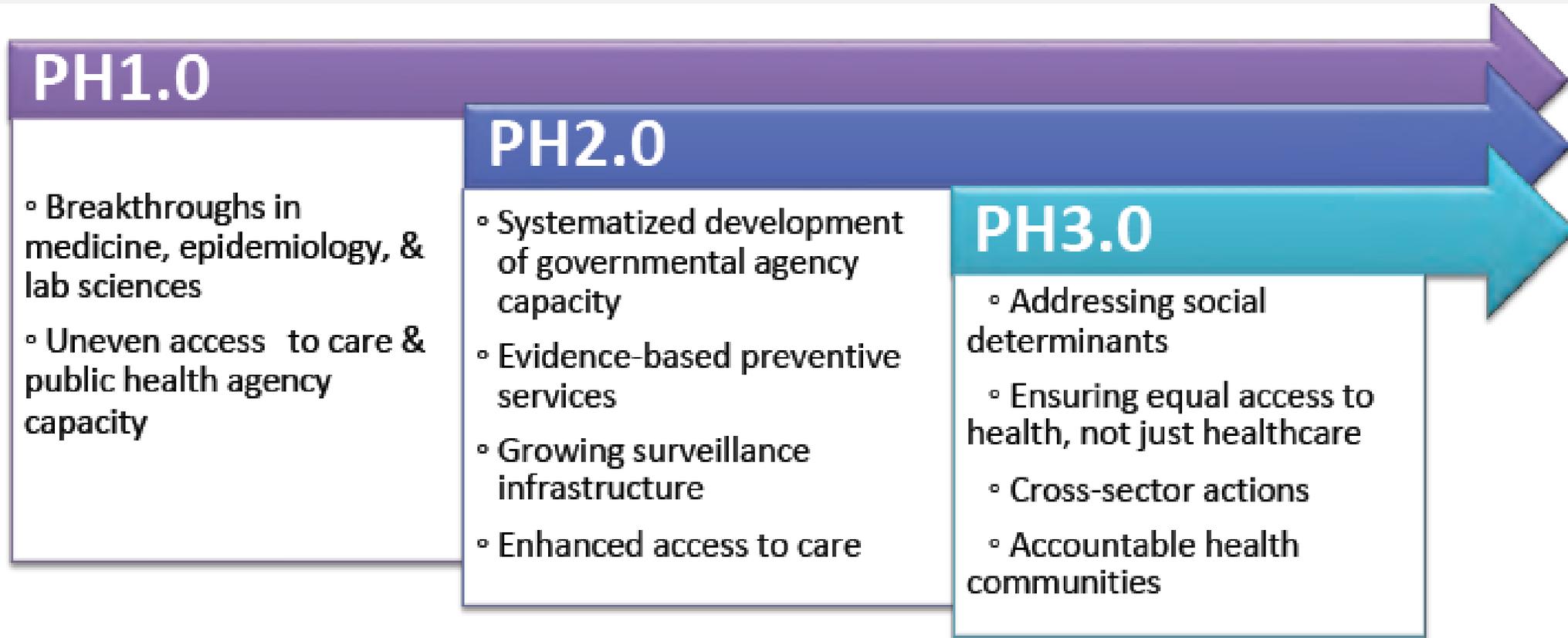
- U.S. Department of Health and Human Services
- “A Call to Action to Create a 21st Century Public Health Infrastructure”
- Scholars estimate that behavioral patterns, environmental exposure, and social circumstances account for as much as 60% of premature deaths.

Figure 3 | The Three Buckets of Prevention



Source: Auerbach, John. "The 3 buckets of prevention." *Journal of Public Health Management and Practice* 22.3 (2016):215-218

Public Health 3.0



HiAP and Public Health 3.0: potential theme for next CHAT meeting?

Roundtable Updates/Q&A

CONTACT INFORMATION



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