



Welcome to the January CAIC & CCIC Coalition Meeting!



MENINGITIS: A LIVED EXPERIENCE AND OPPORTUNITIES TO VACCINATE

Presented by:

Jamie Schanbaum, GSK spokesperson, US Para-athlete and meningitis survivor

Amanda Dempsey, MD, PhD, MPH, Associate Professor of Pediatrics, University of Colorado

If you have any questions throughout the webinar, please enter them through the chat box. There will be an opportunity to have your questions answered at the end of the presentation. If you experience audio issues, please check your volume controls and re-start the program. If that doesn't help or if the presenter is too quiet, please let CCIC staff know through the chat box. For ReadyTalk support, call 800-843-9166.

*Please note that all attendees are muted.



Jamie Schanbaum
GSK spokesperson, US Para-athlete and meningitis survivor



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The New 16 Year Old Adolescent Vaccination Platform

Amanda Dempsey, MD, PhD, MPH
Professor of Pediatrics
Children's Hospital Colorado

January 2019
CCIC Provider Education



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Disclosure

- *I serve on advisory boards for Sanofi, Merck and Pfizer. These companies played no role in this presentation.*



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Today We Will Learn About...

1. What is the 16 year old adolescent vaccination platform?
2. Why was it developed?
3. What else can it be used for?
4. What vaccines are included in it?
5. Tips for Implementation



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What is the 16 Year Old Adolescent Vaccination Platform

- Added to the CDC Schedule in 2017
- Fueled by new vaccine recommendations
- First time to highlight later adolescence as an additional time to focus on recommended vaccines



The “Old” Adolescent Schedule

Recommended Immunization Schedule for Persons Aged 7 Through 18 Years.

Vaccine ▼	Age ►	All Children (except high-risk groups)	Catch up schedule	High-risk groups
		7–10 years	11–12 years	13–18 years
Tetanus, Diphtheria, Pertussis ¹			Tdap	Tdap
Human Papillomavirus ²		see footnote 2	HPV (3 doses)	HPV series
Meningococcal ³		MCV	MCV	MCV
Influenza ⁴			Influenza (Yearly)	
Pneumococcal ⁵			PPSV	
Hepatitis A ⁶			HepA Series	
Hepatitis B ⁷			Hep B Series	
Inactivated Poliovirus ⁸			IPV Series	
Measles, Mumps, Rubella ⁹			MMR Series	
Varicella ¹⁰			Varicella Series	



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The “Old” Adolescent Schedule

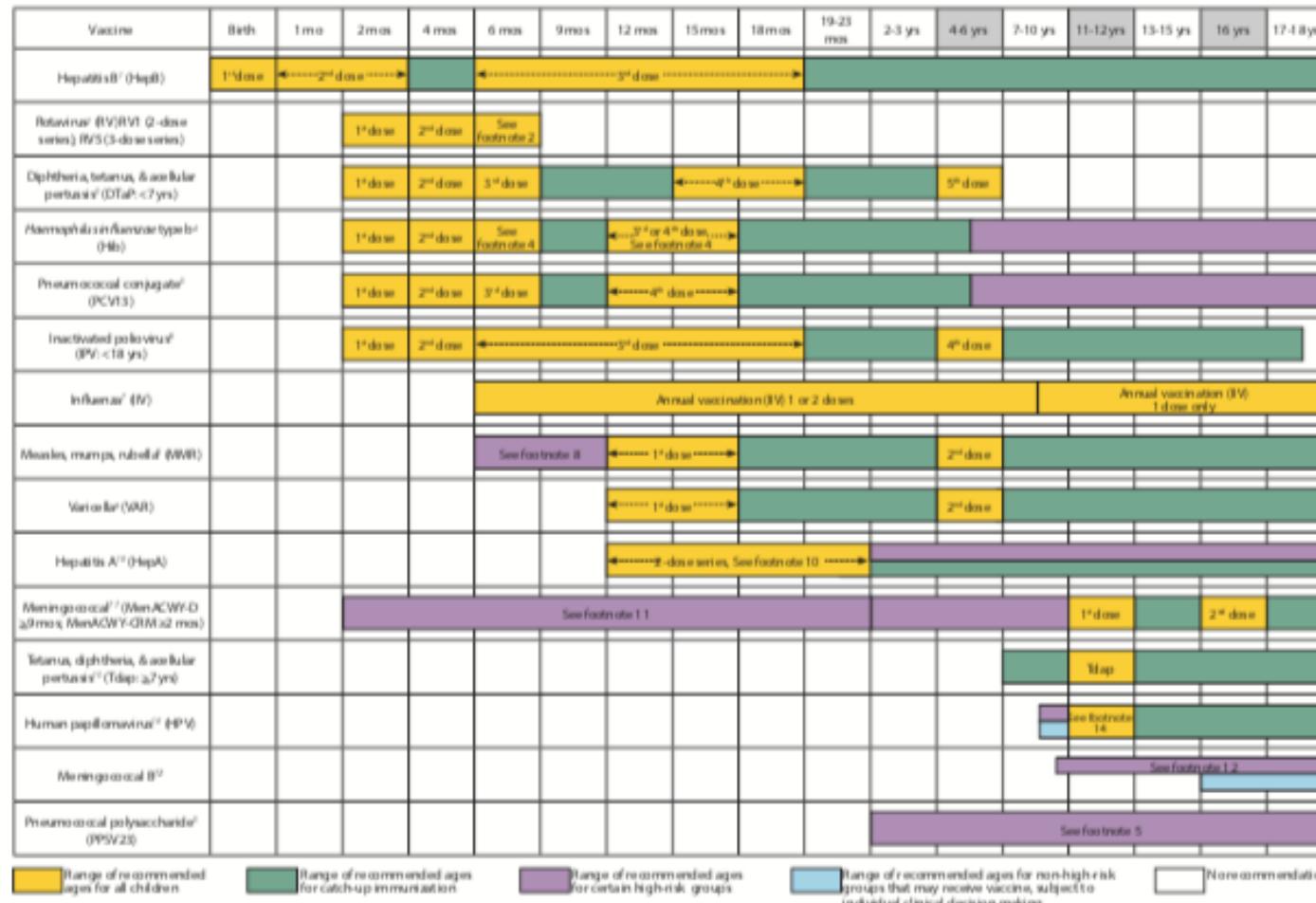
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The “New” Adolescent Schedule

FIGURE. CDC RECOMMENDED IMMUNIZATION SCHEDULE FOR CHILDREN AND ADOLESCENTS AGED 18 YEARS OR YOUNGER—
UNITED STATES, 2018

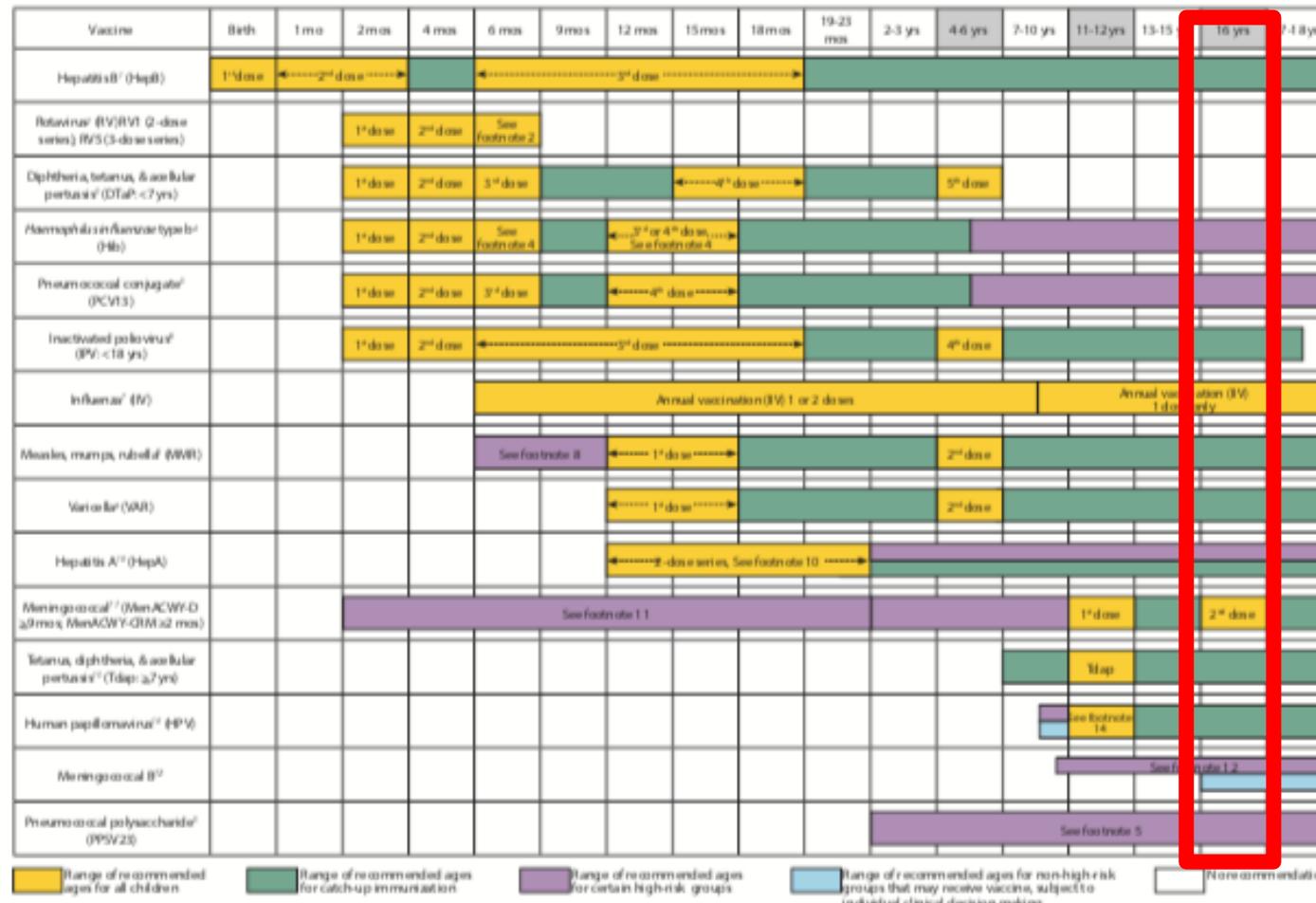


NOTE: The above recommendations must be read along with the footnotes of this schedule.



The “New” Adolescent Schedule

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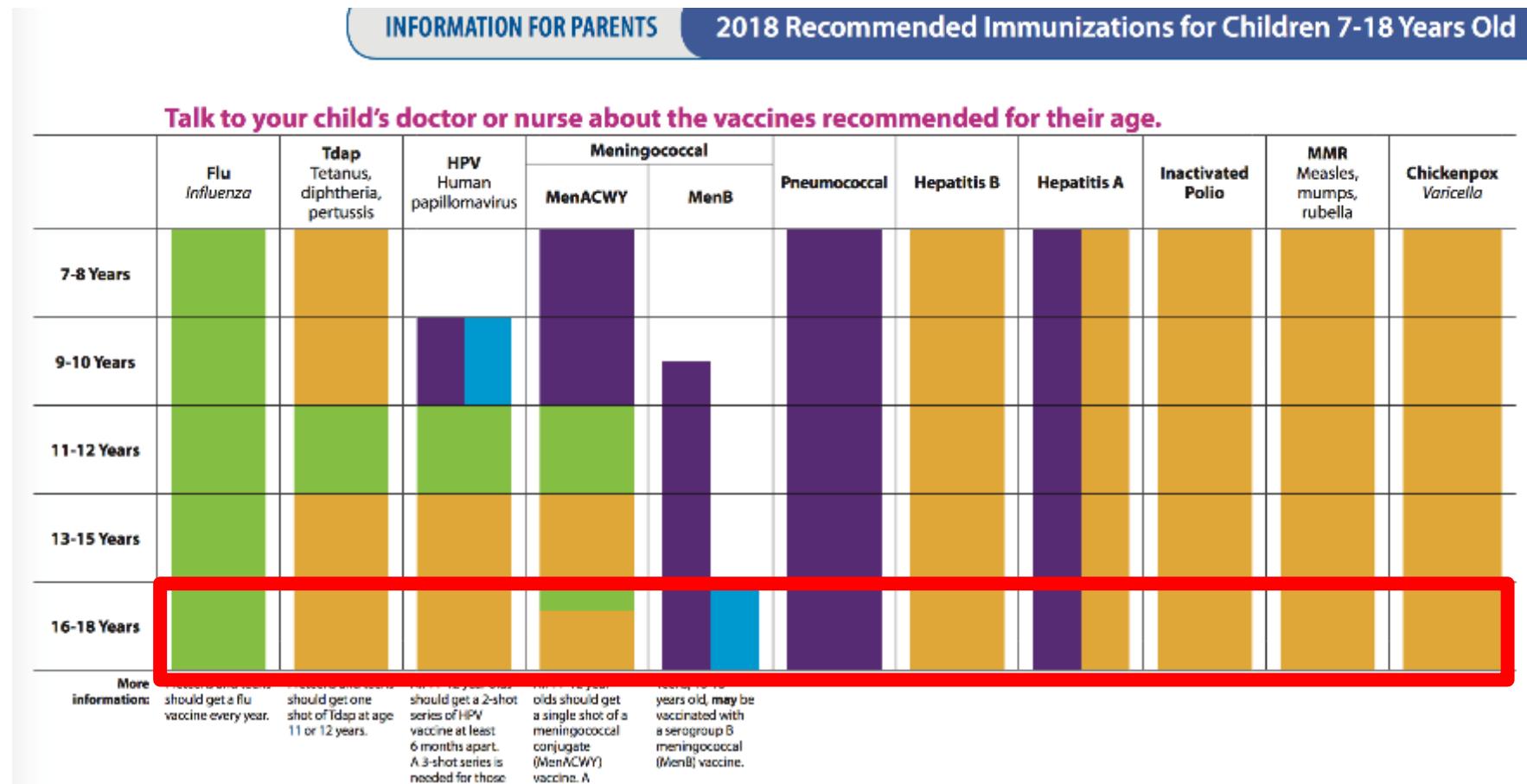


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A Version You Can Read





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Rationale for Development

- 11-12 year “platform” was a case example
- Success of this platform lead to high vaccination rates

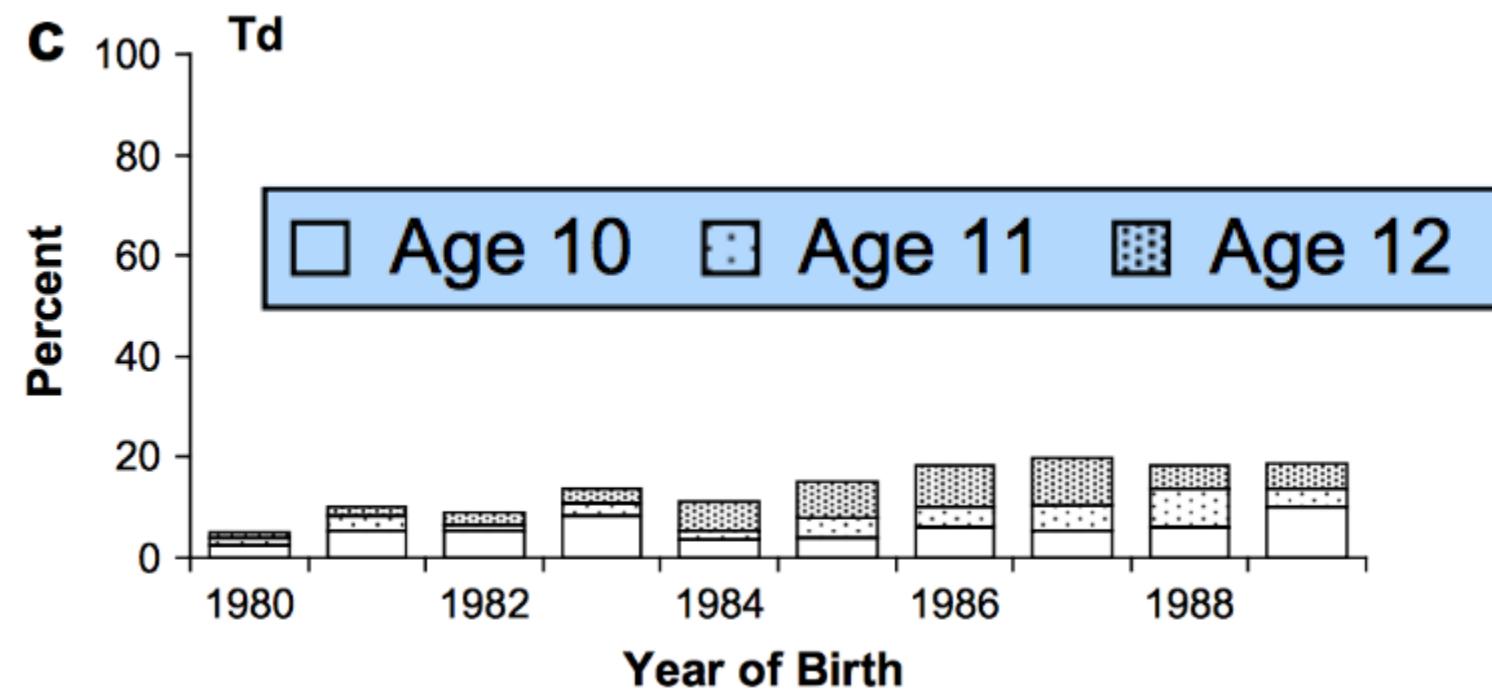


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Td Vaccination Rates – 11-12 year old from 1993-2003



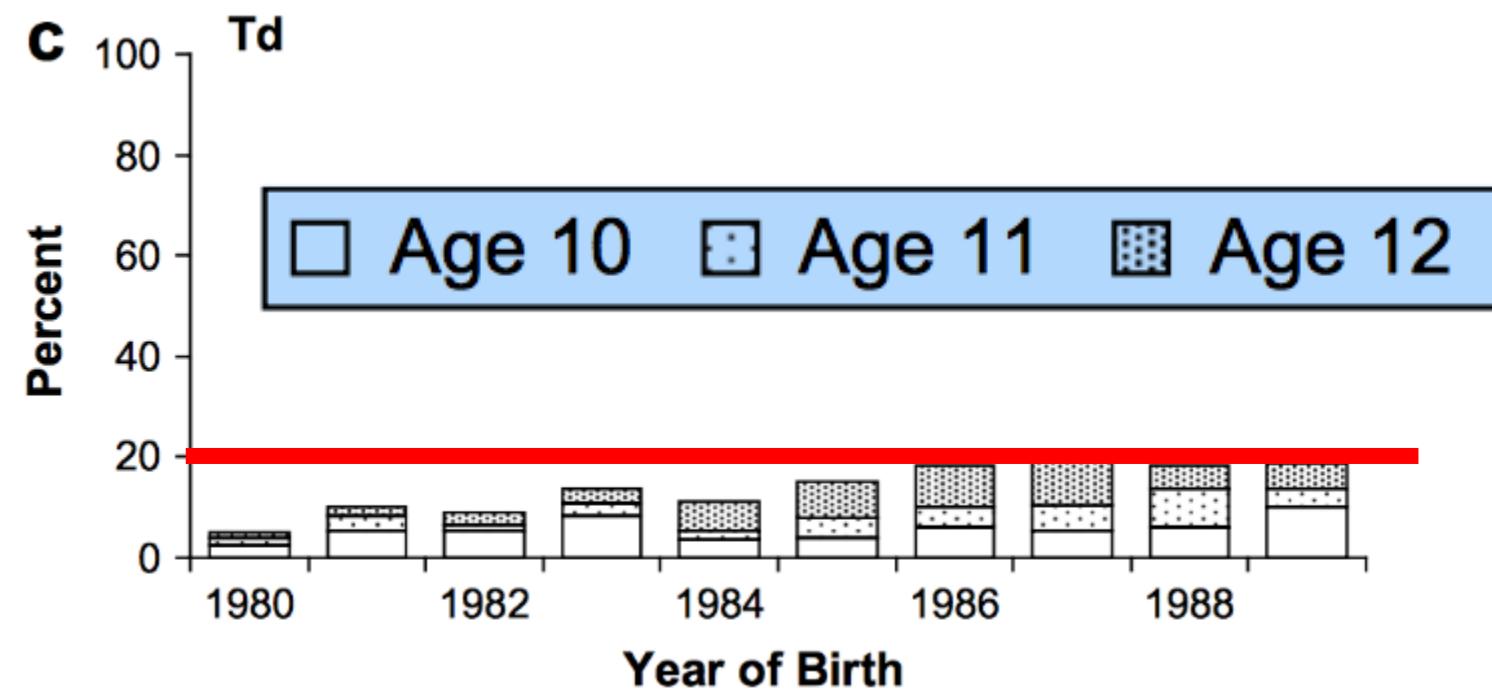


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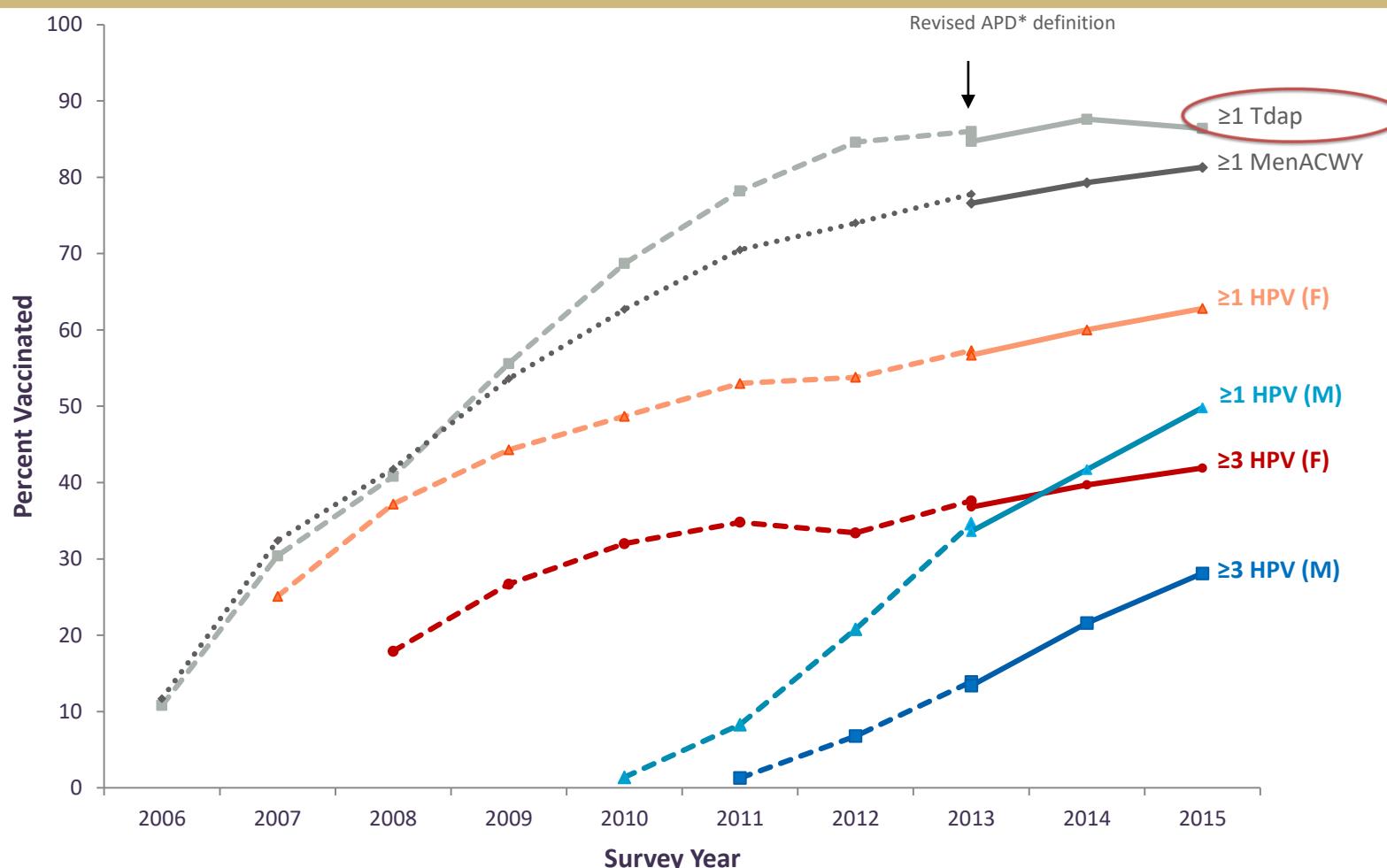


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Tdap Vaccination Rates 13-17 year olds



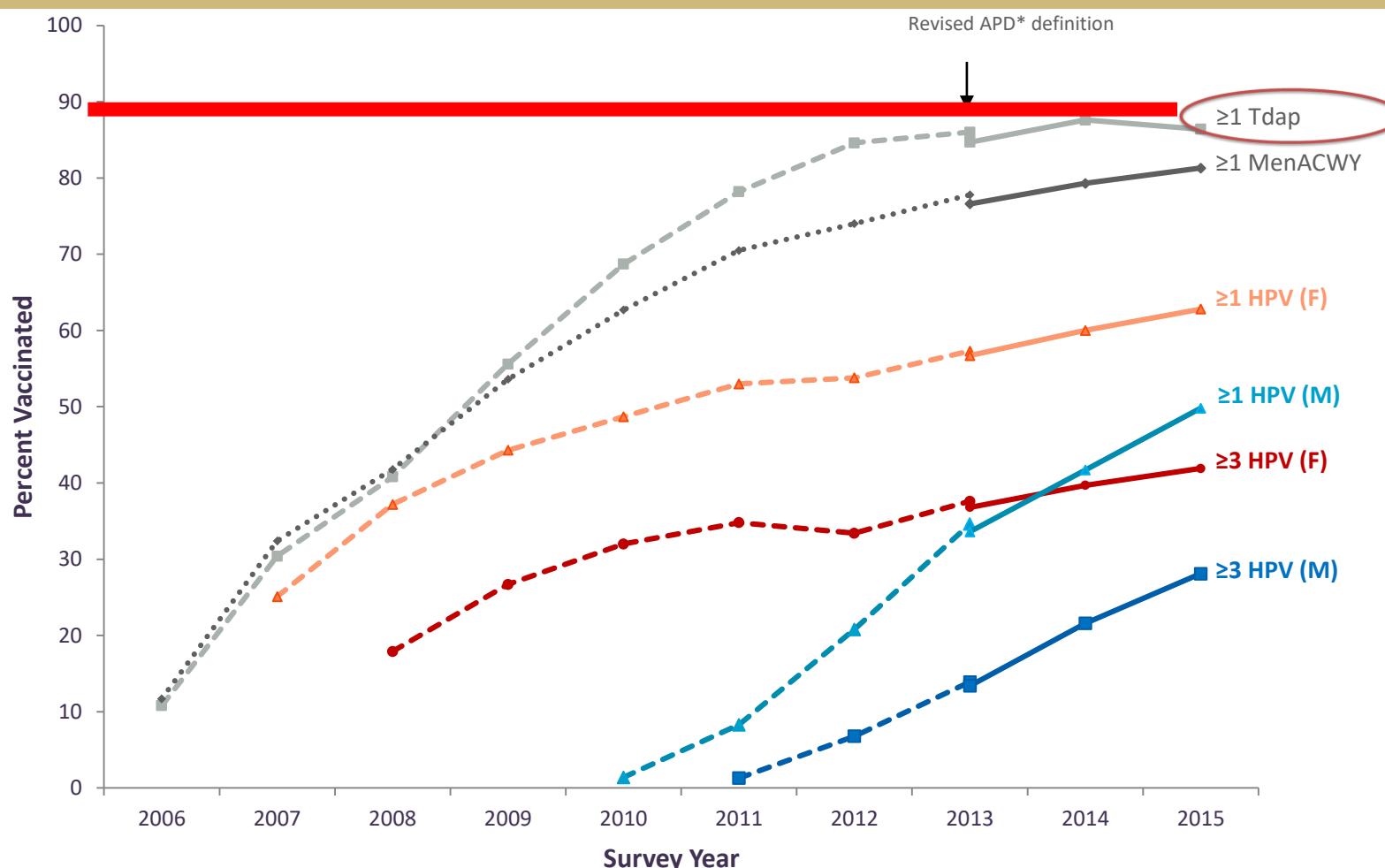


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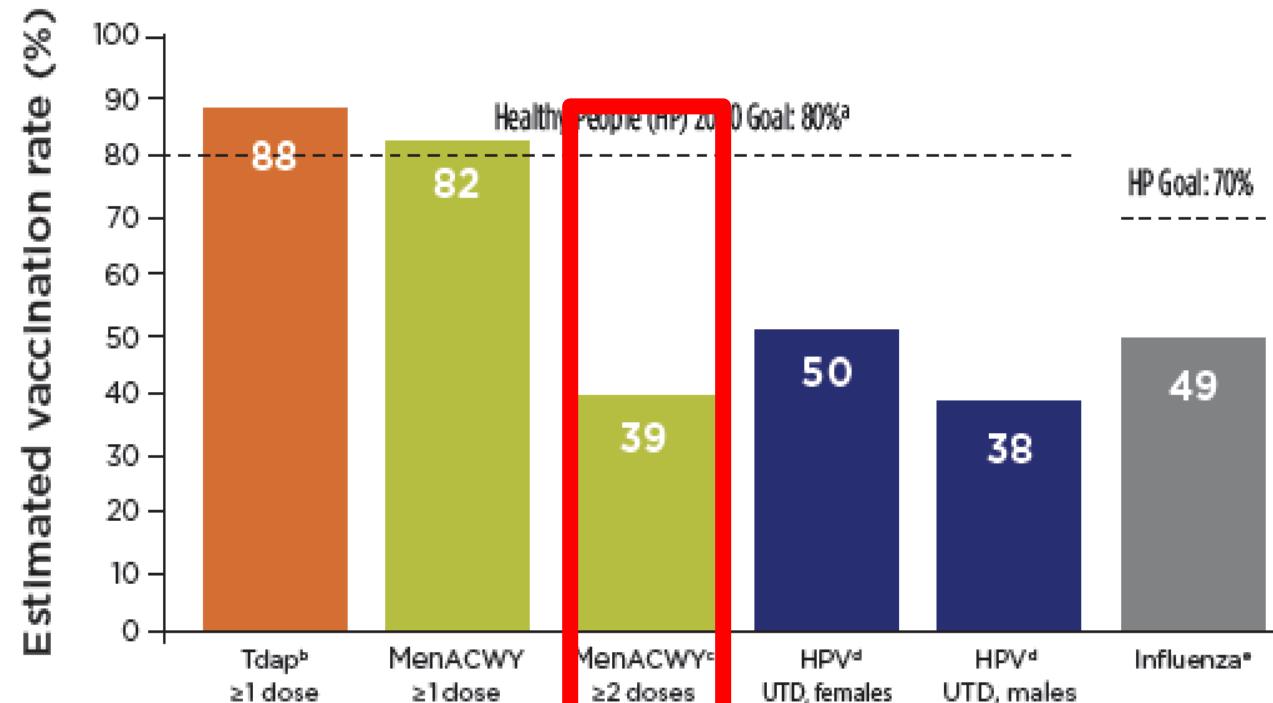
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Vaccination Among Current Adolescents is Suboptimal

2016 Immunization Rates In Adolescents 13 through 17 Years of Age^{1,2}



^a No HP goal has been established for ≥2 doses of MenACWY; ^b Tdap = Tetanus, diphtheria, and acellular pertussis; ^c second-dose rate is based on 17-year-olds; ^d HPV up-to-date (UTD) rate for series completion; ^e 2016-2017 influenza season.



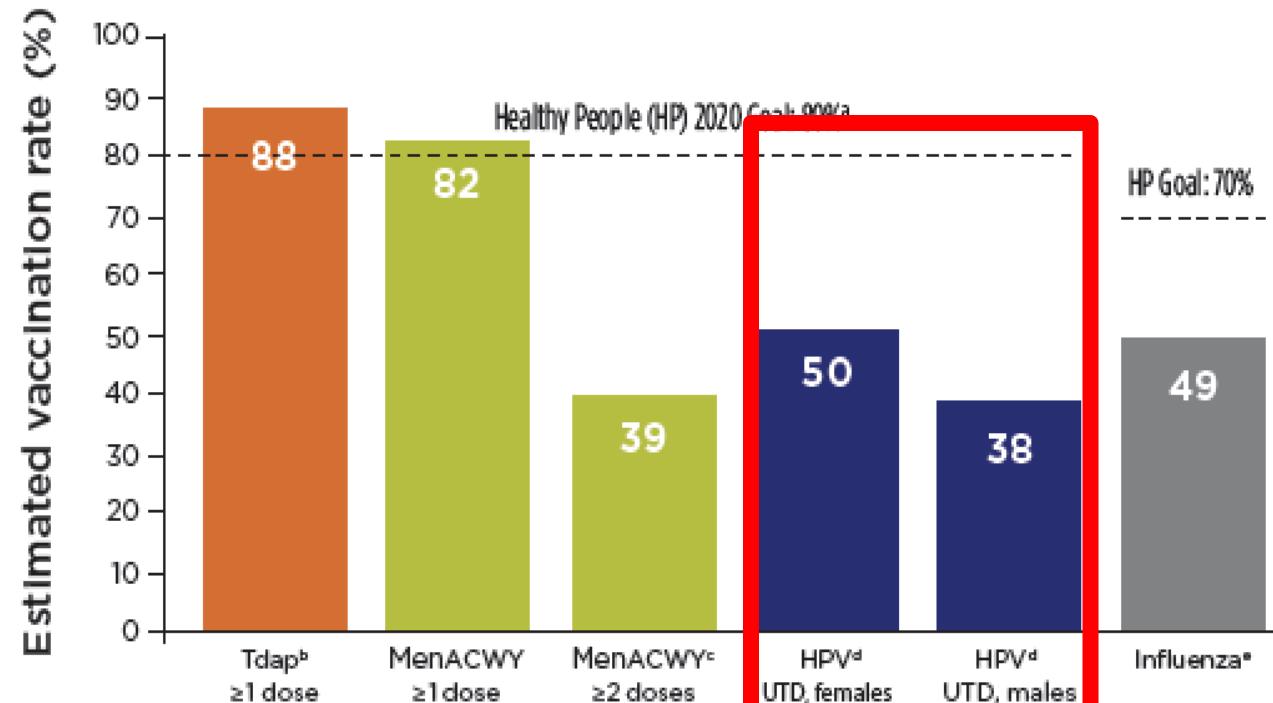
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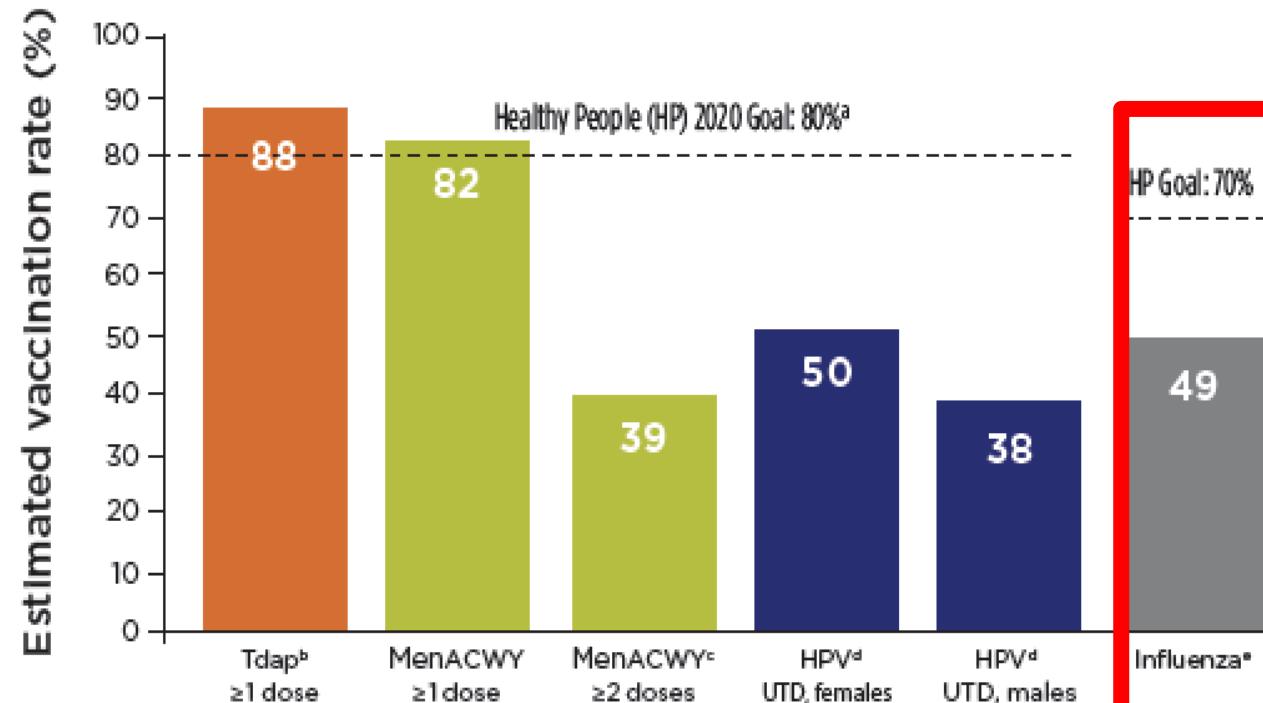
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Later Adolescence is A Time of Transition

- Emerging sexual experience
- New freedoms
- New temptations
- Transitions out of home
- Need to take greater role in health care

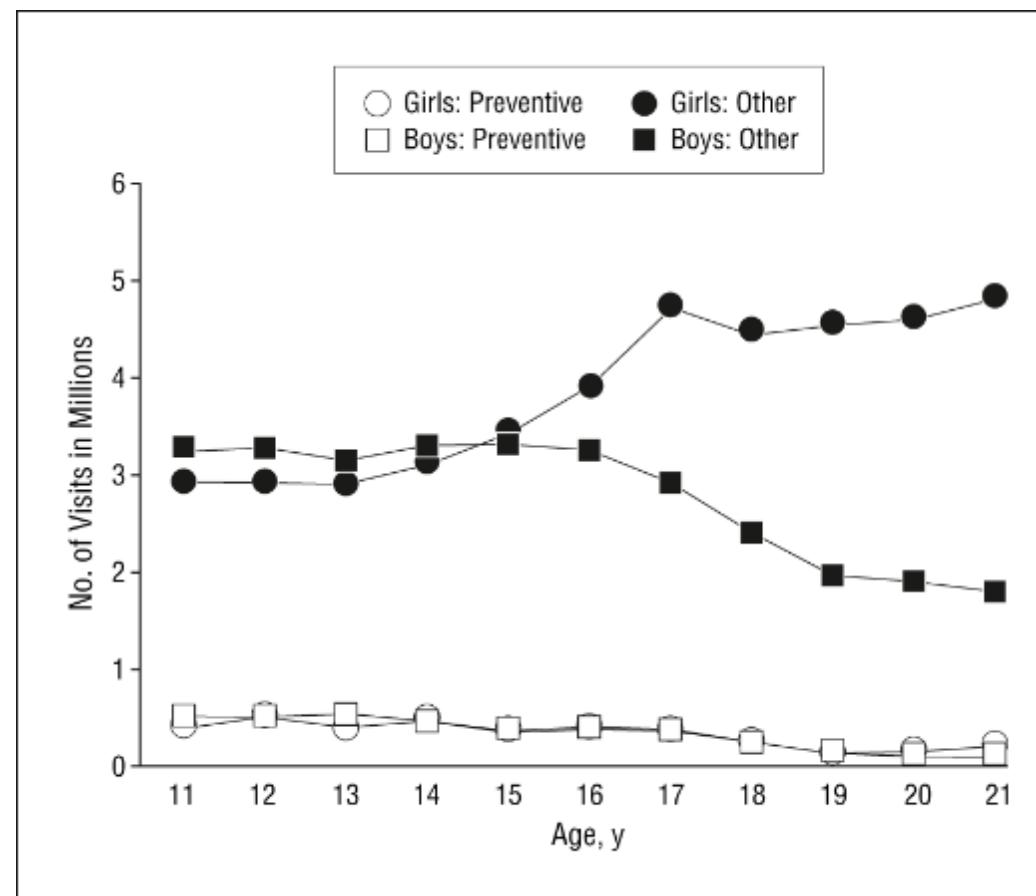


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Yet Older Adolescents Have Less Preventive Care



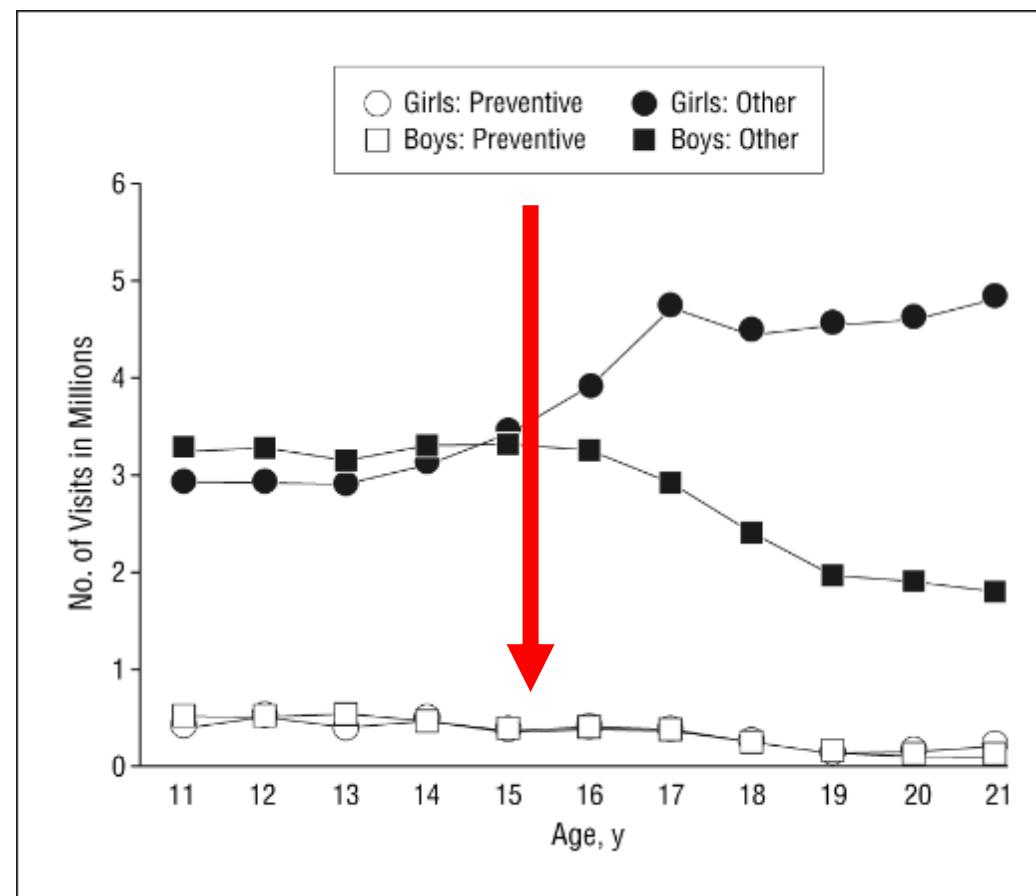


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Summary of the Platform

Vaccine	Type	For Who?
MenACWY	Booster	Recommended For All
Influenza	Annual	Recommended For All
MenB	Primary Series	Recommended to Be Discussed

Plus “catch up” of all other recommended vaccines

Immunize.org/catg.
d/p4022.pdf

You're 16...

We recommend these
vaccines for you!

*You have the rest of your life in front of you. Be sure
you're protected against these serious diseases!*



This vaccine	helps protect you from...	Dose(s) you need at this age
Meningitis vaccine against types A, C, W, and Y (MenACWY)	the most serious types of meningitis that can cause: <ul style="list-style-type: none">• Dangerous infections of the brain and spinal cord• Blood infections that can lead to death within 24 hours• Brain injury, limb amputations, deafness, skin grafts, and kidney damage	MenACWY vaccine <ul style="list-style-type: none">• Dose #2 at age 16• (Dose #1 at age 11–12)
Meningitis vaccine against type B (MenB)		MenB vaccine (talk with your provider about this vaccine) <ul style="list-style-type: none">• Dose #1 at age 16• Dose #2 is given 1 or 6 months after dose #1, depending on the vaccine brand used
Human Papillomavirus (HPV) vaccine	viruses that can cause: <ul style="list-style-type: none">• Cancers of the cervix• Cancers of the penis, vagina, vulva, and anus• Cancers of the throat• Genital warts	HPV vaccine <ul style="list-style-type: none">• The vaccine series is given as 2 or 3 doses, beginning at age 11–12.• Ask your provider if you're up to date with this vaccine
Flu vaccine (influenza)	a virus that can cause: <ul style="list-style-type: none">• High fevers• Severe body aches everywhere• Serious complications, including pneumonia, hospitalization, and death	Influenza vaccine <ul style="list-style-type: none">• 1 dose every year

If you're behind on your shots, you may need these vaccines, too. Check with your provider.

- Chickenpox (varicella)
- Hepatitis A
- Hepatitis B
- MMR (measles, mumps, rubella)
- Tdap (tetanus, diphtheria, pertussis/whooping cough)
If you're pregnant, you'll need an additional dose.

Remember: Getting shots is better than getting these diseases. Don't miss out on everything life has in store for you. Get protected!

Meningococcal Vaccines

Two Types of Meningococcal Vaccines

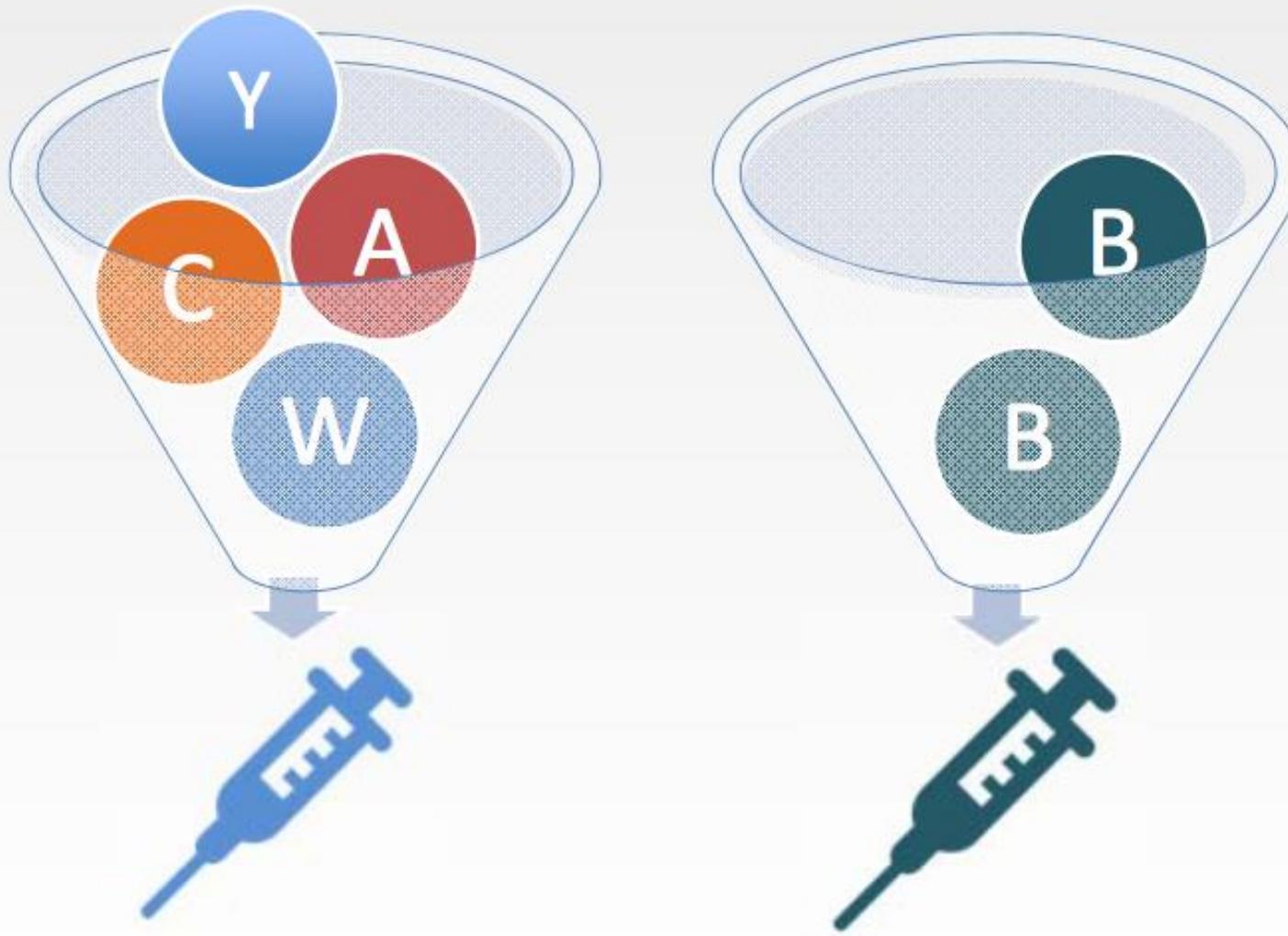
Meningococcal Conjugate Vaccines (MenACWY)

- Conjugated meningococcal capsular polysaccharide
- Available since 2005
- ACIP recommendations
 - In 2005 – Routinely recommended at age 11–12
 - In 2010 – Booster dose recommended at age 16

Meningococcal Serogroup B Vaccines (MenB)

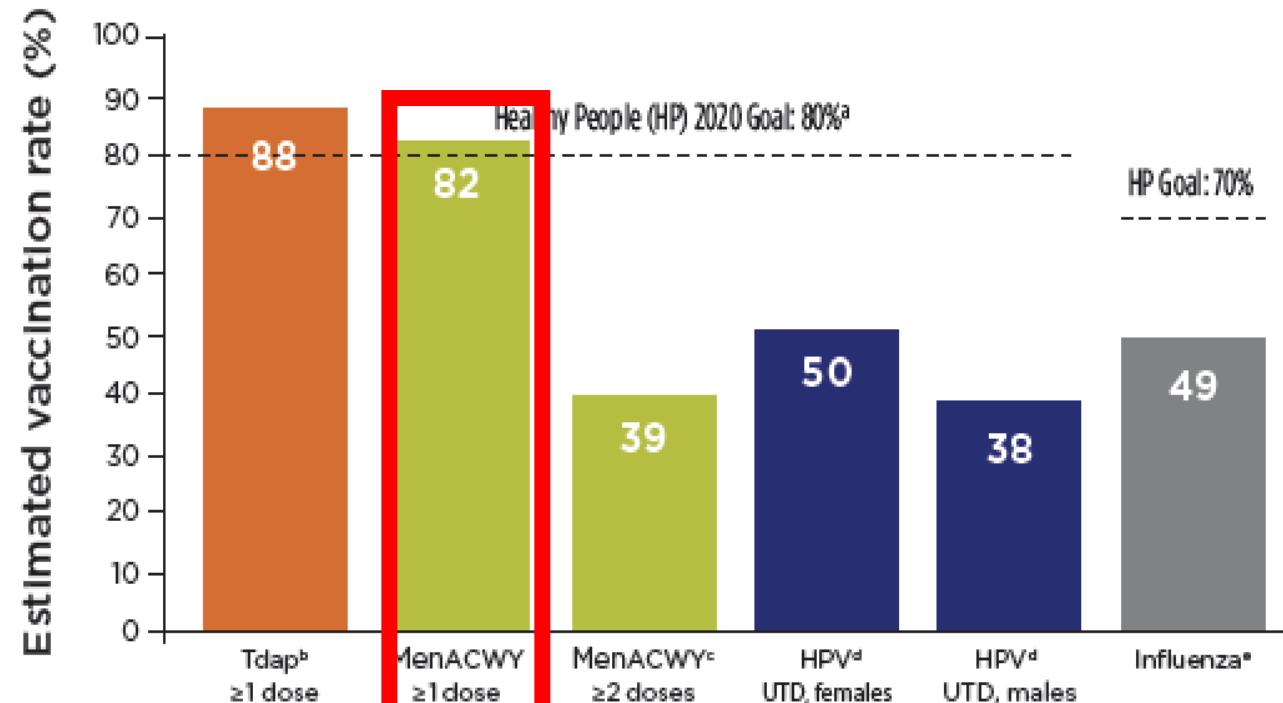
- Meningococcal capsular proteins
- Available since late 2014
- ACIP recommendations
 - In 2015 – Routinely recommended for people at increased risk age ≥ 10 years
 - Later in 2015 – “May be given” to healthy persons 16 to 23 years of age, preferred at 16–18

There is currently no vaccine that contains all 5 serogroups



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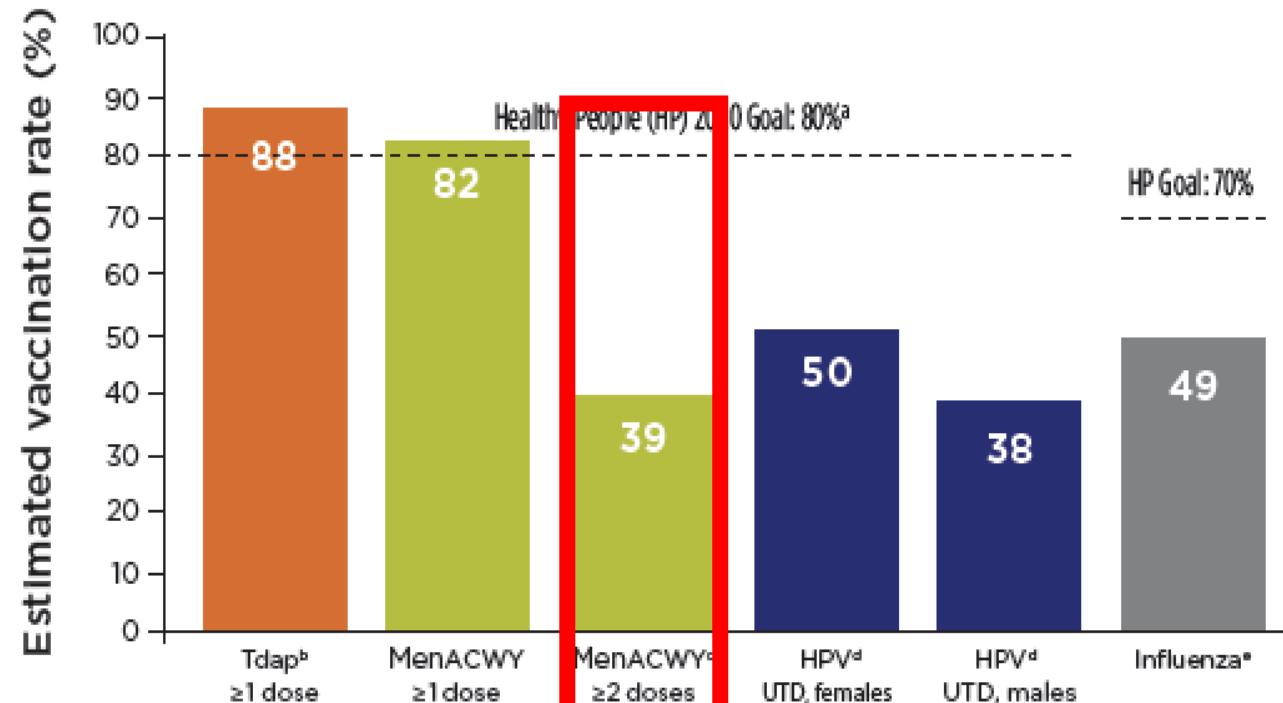
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ACIP Recommendation Categories

Category A recommendations

- For all persons in an age- or risk-factor-based group
- Examples:
 - MenACWY – healthy adolescents, high risk
 - MenB – high risk

ACIP Recommendation Categories

Category A recommendations

- For all persons in an age- or risk-factor-based group
- Examples:
 - MenACWY – healthy adolescents, high risk
 - MenB – high risk

Category B recommendations

- Do not apply to everyone, but in the context of a clinician-patient interaction, vaccination may be appropriate for a patient
- Example:
 - MenB – healthy adolescents



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Cat B Does NOT – “Permissive”

- Permissive – HPV
 - “can give HPV to boys if you want to”
- Category B – Men B
 - “Should be based on a discussion with provider”



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Cat B Does NOT – “Permissive”

- Permissive – HPV

**This means you are supposed to
talk about Men B Vaccines with
all age eligible patients!**

- “Should be based on a discussion with provider”

MenACWY Schedule

Age at 1 st dose	Age at booster	Notes
11–12 years	16 years	Routine recommendation
13–15 years	16–18 years	Delayed start
16–18 years	No	Delayed start

The minimum interval between doses is **8 weeks**,
but it's preferable to use a longer interval between doses

MMWR 2013;62(RR-2):1-28

Why boost MenACWY at 16 years of age? Immunity wanes

- After the 1st dose of MenACWY –
 - Circulating antibody levels wane
 - So vaccine effectiveness drops
- A single dose administered at age 11 or 12 years – unlikely to protect most adolescents through the period of increased risk at ages 16 through 21 years
- Booster dose recommended routinely

MMWR 2013;62(RR-2):1-28, MMWR 2011;60(3):72-76

Meningococcal Serogroup B Vaccines and Schedule

	MenB-FHbp	MenB-4C
Trade name	Trumenba	Bexsero
Manufacturer	Pfizer	GlaxoSmithKline
Licensure	October, 2014	January, 2015
Components	2	4
Approved age	10 through 25 yrs	10 through 25 yrs
Schedule	2- or 3-dose series (0, 6 months for healthy people; 0, 2, 6 months for people at increased risk)	2-dose series (0, \geq 1 month)

Pfizer and GSK product information. CBER website.



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Men B Recommendations

- At Risk – Category A
- “Healthy” – Category B



Groups at Increased Risk for Meningococcal Disease

Condition	Risk for Serogroups C&Y	Risk for Serogroup B
Persistent complement component deficiency (including Eculizumab)	✓	✓
Functional or anatomic asplenia	✓	✓
Certain microbiologists	✓	✓
People in outbreak area	✓	✓
International travelers to certain places	✓	no
People with HIV infection	✓	no
1 st year college students who live in a dormitory	✓	no



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International travelers to certain places	✓	no
People with HIV infection	✓	no
1 st year college students who live in a dormitory	✓	✗



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Certain microbiologists	✓	✓
People in outbreak area	✓	✓
International travelers to certain places	✓	no
People with HIV infection	✓	no
1 st year college students who live in a dormitory	✓	X



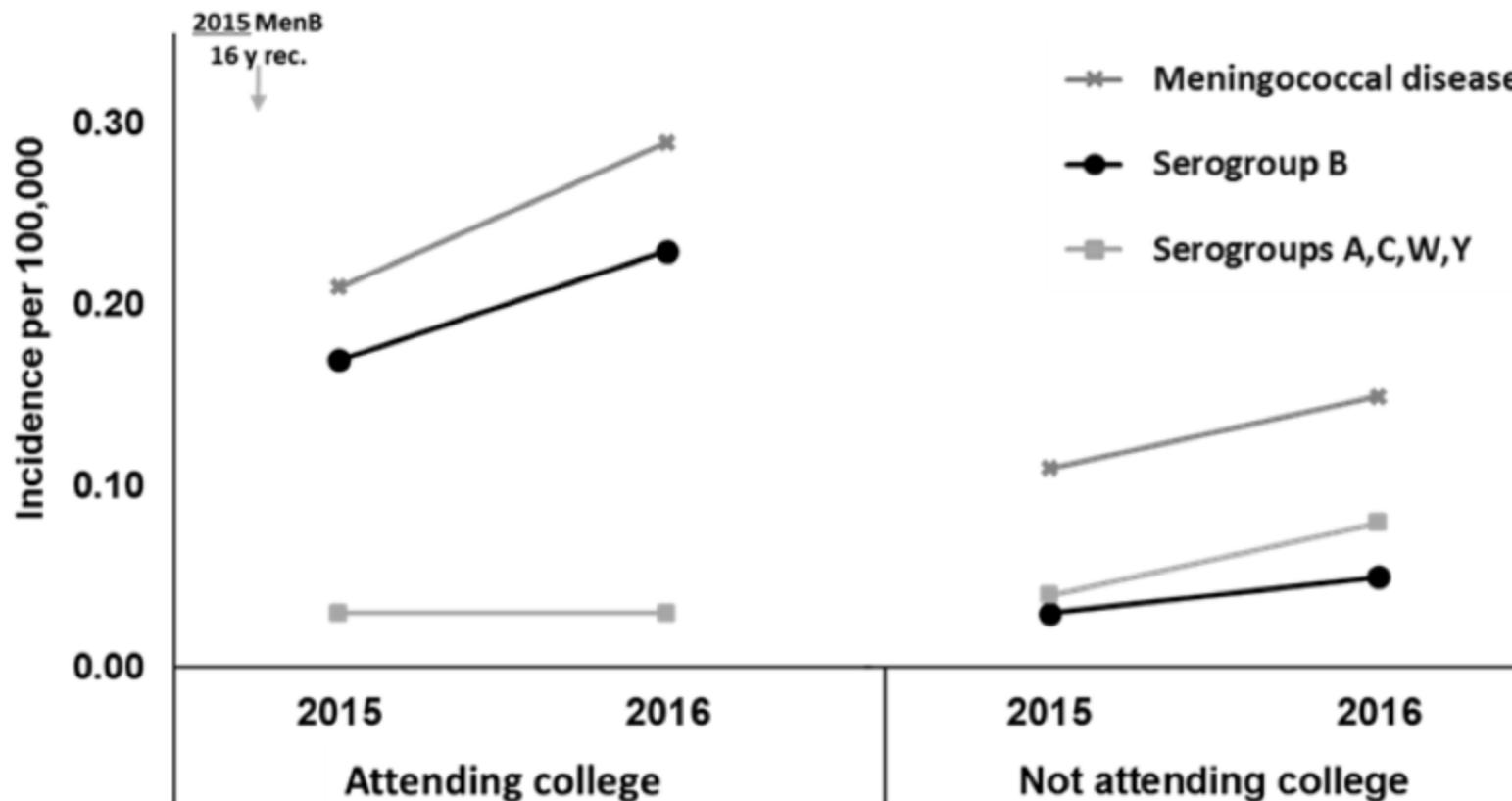
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College Students and Men B

B



MenB Vaccine Schedules – More Information

- Minimum intervals between doses have not been defined; use only the routine schedule
- The need for a booster dose(s) is unknown
- Finally, MenB vaccines can be given at the same time as other vaccines, including MenACWY and all other vaccines that might be indicated at the 16-year-old visit

MenB Vaccines Are NOT Interchangeable

- The **same vaccine** must be used for all doses in the series
- If a person gets a dose of both vaccines, **pick one** and complete the routine series with that brand.
- The dose of the other brand of vaccine **will NOT** count as part of the series

MMWR 2015;64(No.41):1171-76

MenB Vaccines ARE Covered by VFC & ACA

- Vaccines with a Category B recommendation, such as MenB for healthy adolescents, are included in the:
 - VFC Program
 - Affordable Care Act
- Both MenB vaccines are covered



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Tips for Implementation

- Proactive outreach
- Get the whole team on board
- Foster a "culture of prevention"
- Educate about the need for a 16 year old visit early



THANK YOU!!!!
Amanda.Dempsey@ucdenver.edu



"If you connect the measles it spells out 'My parents are idiots.'"