The 2020 Adult Immunization Update

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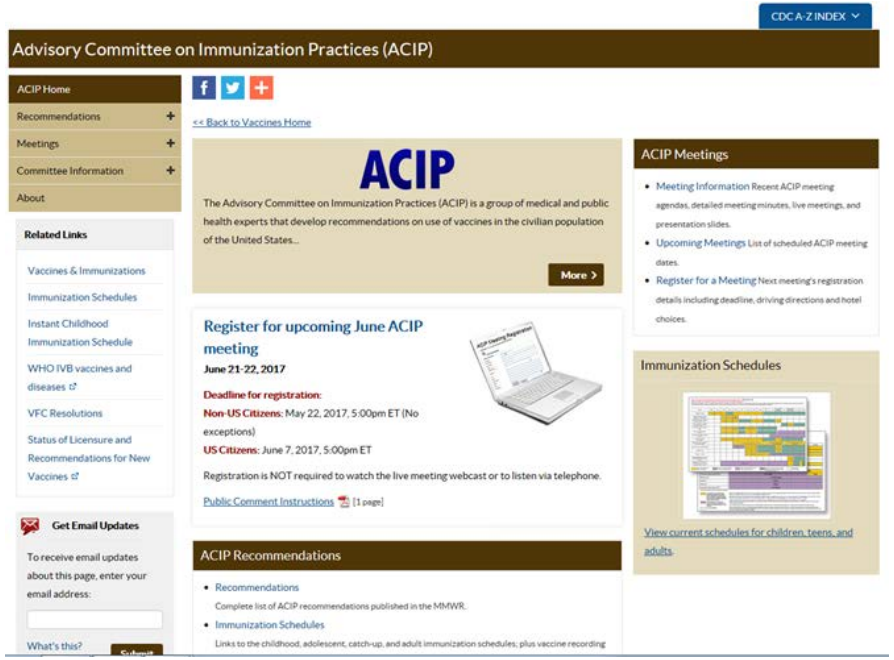
Speaker Disclosures

- Andrew Kroger is a federal government employee with no financial interest or conflict with the manufacturer of any product named in this presentation.
- Andrew Kroger will discuss the off-label use of Serogroup B Meningococcal Vaccine and Tetanus-reduced-diptheria acellular pertussis vaccine (Tdap).
- Andrew Kroger will not discuss a vaccine not currently licensed by the FDA.
- The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

Disclosures

- The recommendations to be discussed are primarily those of the Advisory Committee on Immunization Practices (ACIP):
  - Composed of 15 non-government experts in clinical medicine and public health.
  - Provides guidance on use of vaccines and other biologic products to DHHS, CDC, and the U.S. Public Health Service.



Next ACIP Meeting
February 26-27, 2020

http://www.cdc.gov/vaccines/acip/meetings/upcoming-dates.html

Overview

- Adult schedule
- Focused updates to the schedule
  - HPV
  - PCV13
  - MenB
  - HepA
  - Tdap
- Vaccinate with Confidence

The Adult Schedule

Recommended Adult Immunization Schedule
for ages 19 years or older

UNITED STATES
2020

How to use the adult immunization schedule

1. Determine recommended vaccinations by age (**Table 1**)
2. Assess need for additional recommended vaccinations by medical condition and other indications (**Table 2**)
3. Review vaccine types, frequencies, and intervals and considerations for special situations (**Notes**)

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip) and approved by the Centers for Disease Control and Prevention (www.cdc.gov), American College of Physicians (www.acponline.org), American Academy of Family Physicians (www.aafp.org), American College of Obstetricians and Gynecologists (www.acog.org), and American College of Nurse-Midwives (www.midwife.org).

Vaccines in the Adult Immunization Schedule*

Vaccines	Abbreviations	Trade names
Haemophilus influenzae type b vaccine	Hib	ActHIB® Hiberix® PedvaxHIB®
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis A and hepatitis B vaccine	HepA-HepB	Twinrix®
Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB® Heplisav-B®
Human papillomavirus vaccine	HPV vaccine	Gardasil 9®
Influenza vaccine (inactivated)	IIV	Many brands
Influenza vaccine (live, attenuated)	LAIV	FluMist® Quadrivalent
Influenza vaccine (recombinant)	RIV	Flublok® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R® II
Meningococcal serogroups A, C, W, Y vaccine	MenACWY	Menactra® Menveo®
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Bexsero® Trumenba®
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax® 23
Tetanus and diphtheria toxoids	Td	Tenivac® Tdvax™
Tetanus and diphtheria toxoids and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Varicella vaccine	VAR	Varivax®
Zoster vaccine, recombinant	RZV	Shingrix
Zoster vaccine live	ZVL	Zostavax®

*Administer recommended vaccines if vaccination history is incomplete or unknown. Do not restart or add doses to vaccine series if there are extended intervals between doses. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to the local or state health department
- Clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System at www.vaers.hhs.gov or 800-822-7967

Injury claims

All vaccines included in the adult immunization schedule except pneumococcal 23-valent polysaccharide (PPSV23) and zoster (RZV, ZVL) vaccines are covered by the Vaccine Injury Compensation Program. Information on how to file a vaccine injury claim is available at www.hrsa.gov/vaccinecompensation.

Questions or comments

Contact www.cdc.gov/cdc-info or 800-CDC-INFO (800-232-4636), in English or Spanish, 8 a.m.–8 p.m. ET, Monday through Friday, excluding holidays.

Download the CDC Vaccine Schedules App for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

Helpful Information

- Complete ACIP recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- General Best Practice Guidelines for Immunization (including contraindications and precautions): www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Vaccine information statements: www.cdc.gov/vaccines/hcp/vis/index.html
- Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/pubs/surv-manual
- Travel vaccine recommendations: www.cdc.gov/travel
- Recommended Child and Adolescent Immunization Schedule, United States, 2020: www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CS310021-A

Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2020

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV) or **Influenza recombinant** (RIV)	1 dose annually			
or				
Influenza live, attenuated (LAIV)	1 dose annually			
Tetanus, diphtheria, pertussis (Tdap or Td)	1 dose Tdap, then Td or Tdap booster every 10 years			
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)			
Varicella (VAR)	2 doses (if born in 1980 or later)		2 doses	
Zoster recombinant (RZV) *(preferred)*			2 doses	
or			or	
Zoster live (ZVL)			1 dose	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal conjugate (PCV13)	1 dose			65 years and older
Pneumococcal polysaccharide (PPSV23)	1 or 2 doses depending on indication			1 dose
Hepatitis A (HepA)	2 or 3 doses depending on vaccine			
Hepatitis B (HepB)	2 or 3 doses depending on vaccine			
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, see notes for booster recommendations			
Meningococcal B (MenB)	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations			
	19 through 23 years			
***Haemophilus influenzae* type b** (Hib)	1 or 3 doses depending on indication			

Recommended vaccination for adults who meet age requ… lack documentation of vaccination, or lack evidence of past infection

…additional risk factor or another indication

…ccination based on shared …clinical decision-making

No recommendation/ Not applicable

Table 2 Recommended Adult Immunization Schedule by Medical Condition and Other Indications, United States, 2020

Vaccine	Pregnancy	Immuno-compromised (excluding HIV infection)	HIV infection CD4 count <200	HIV infection CD4 count ≥200	Asplenia, complement deficiencies	End-stage renal disease; or on hemodialysis	Heart or lung disease, alcoholism[1]	Chronic liver disease	Diabetes	Health care personnel[2]	Men who have sex with men
IIV or RIV	1 dose annually										
or										or	
LAIV	NOT RECOMMENDED						PRECAUTION			1 dose annually	
Tdap or Td	1 dose Tdap each pregnancy	1 dose Tdap, then Td or Tdap booster every 10 years									
MMR	NOT RECOMMENDED	1 or 2 doses depending on indication									
VAR	NOT RECOMMENDED	2 doses									
RZV *(preferred)*	DELAY				2 doses at age ≥50 years						
or					or						
ZVL	NOT RECOMMENDED				1 dose at age ≥60 years						
HPV	DELAY	3 doses through age 26 years			2 or 3 doses through age 26 years						
PCV13		1 dose									
PPSV23		1, 2, or 3 doses depending on age and indication									
HepA					2 or 3 doses depending on vaccine						
HepB							2 or 3 doses depending on vaccine				
MenACWY	1 or 2 doses depending on indication, see notes for booster recommendations										
MenB	PRECAUTION	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations									
Hib		3 doses HSCT[3] recipients only			1 dose						

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection

Recommended vaccination for adults with an additional risk factor or another indication

Precaution—vaccination might be indicated if benefit of protection outweighs risk

Delay vaccination until after pregnancy if vaccine is indicated

Not recommended/ contraindicated—vaccine should not be administered

No recommendation/ Not applicable

1. Precaution for LAIV does not apply to alcoholism. **2.** See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations. **3.** Hematopoietic stem cell transplant.

Notes

Recommended Adult Immunization Schedule, United States, 2020

Haemophilus influenzae type b vaccination

Special situations

- **Anatomical or functional asplenia (including sickle cell disease)**: 1 dose if previously did not receive Hib; if elective splenectomy, 1 dose, preferably at least 14 days before splenectomy
- **Hematopoietic stem cell transplant** (HSCT): 3-dose series 4 weeks apart starting 6–12 months after successful transplant, regardless of Hib vaccination history

Hepatitis A vaccination

Routine vaccination

- **Not at risk but want protection from hepatitis A** (identification of risk factor not required): 2-dose series HepA (Havrix 6–12 months apart or Vaqta 6–18 months apart [minimum interval: 6 months]) or 3-dose series HepA-HepB (Twinrix at 0, 1, 6 months [minimum intervals: 4 weeks between doses 1 and 2/5 months between doses 2 and 3])

Special situations

- **At risk for hepatitis A virus infection**: 2-dose series HepA or 3-dose series HepA-HepB as above
  - **Chronic liver disease** (e.g., persons with hepatitis B, hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal)
  - **HIV infection**
  - **Men who have sex with men**
  - **Injection or noninjection drug use**
  - **Persons experiencing homelessness**
  - **Work with hepatitis A virus** in research laboratory or with nonhuman primates with hepatitis A virus infection
  - **Travel in countries with high or intermediate endemic hepatitis A**
  - **Close, personal contact with international adoptee** (e.g., household or regular babysitting) in first 60 days after arrival from country with high or intermediate endemic hepatitis A (administer dose 1 as soon as adoption is planned, at least 2 weeks before adoptee's arrival)
  - **Pregnancy** if at risk for infection or severe outcome from infection during pregnancy
  - **Settings for exposure, including** health care settings targeting services to injection or noninjection drug users or group homes and nonresidential day care facilities for developmentally disabled persons (individual risk factor screening not required)

Hepatitis B vaccination

Routine vaccination

- **Not at risk but want protection from hepatitis B** (identification of risk factor not required): 2- or 3-dose series (2-dose series Heplisav-B at least 4 weeks apart [2-dose series HepB only applies when 2 doses of Heplisav-B are used at least 4 weeks apart] or 3-dose series Engerix-B or Recombivax HB at 0, 1, 6 months [minimum intervals: 4 weeks between doses 1 and 2/8 weeks between doses 2 and 3/16 weeks between doses 1 and 3]) or 3-dose series HepA-HepB (Twinrix at 0, 1, 6 months [minimum intervals: 4 weeks between doses 1 and 2/5 months between doses 2 and 3])

Special situations

- **At risk for hepatitis B virus infection**: 2-dose (Heplisav-B) or 3-dose (Engerix-B, Recombivax HB) series or 3-dose series HepA-HepB (Twinrix) as above
  - **Chronic liver disease** (e.g., persons with hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice upper limit of normal)
  - **HIV infection**
  - **Sexual exposure risk** (e.g., sex partners of hepatitis B surface antigen [HBsAg]-positive persons; sexually active persons not in mutually monogamous relationships; persons seeking evaluation or treatment for a sexually transmitted infection; men who have sex with men)
  - **Current or recent injection drug use**
  - **Percutaneous or mucosal risk for exposure to blood** (e.g., household contacts of HBsAg-positive persons; residents and staff of facilities for developmentally disabled persons; health care and public safety personnel with reasonably anticipated risk for exposure to blood or blood-contaminated body fluids; hemodialysis, peritoneal dialysis, home dialysis, and predialysis patients; persons with diabetes mellitus age younger than 60 years and, at discretion of treating clinician, those age 60 years or older)
  - **Incarcerated persons**
  - **Travel in countries with high or intermediate endemic hepatitis B**
  - **Pregnancy** if at risk for infection or severe outcome from infection during pregnancy (Heplisav-B not currently recommended due to lack of safety data in pregnant women)

Human papillomavirus vaccination

Routine vaccination

- **HPV vaccination recommended for all adults through age 26 years**: 2- or 3-dose series depending on age at initial vaccination or condition:
  - **Age 15 years or older at initial vaccination**: 3-dose series at 0, 1–2, 6 months (minimum intervals: 4 weeks between doses 1 and 2/12 weeks between doses 2 and 3/5 months between doses 1 and 3; repeat dose if administered too soon)
  - **Age 9 through 14 years at initial vaccination and received 1 dose or 2 doses less than 5 months apart**: 1 dose
  - **Age 9 through 14 years at initial vaccination and received 2 doses at least 5 months apart**: HPV vaccination complete, no additional dose needed.
- **If completed valid vaccination series with any HPV vaccine, no additional doses needed**

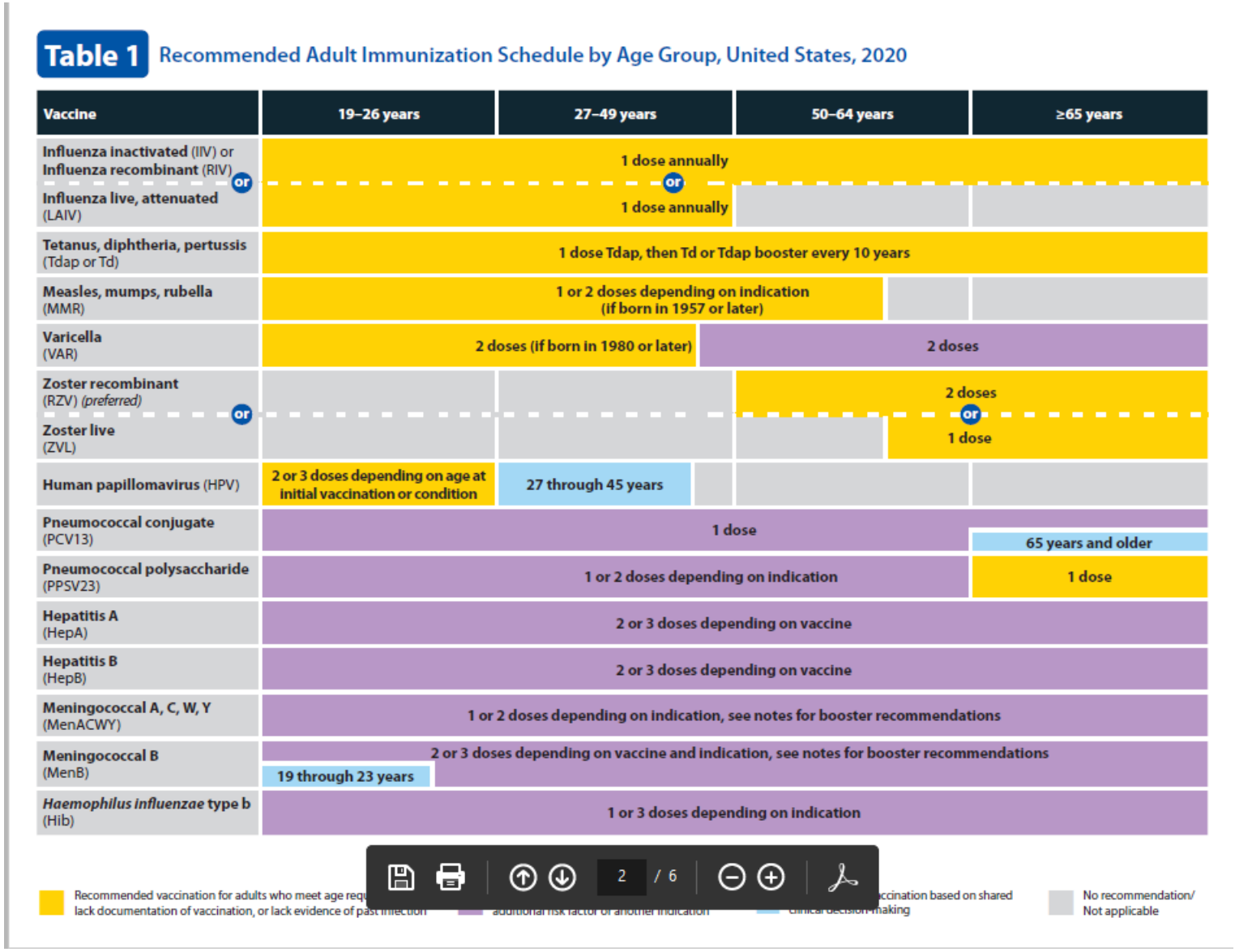
Shared clinical decision-making

- **Age 27 through 45 years based on shared clinical decision-making**:
  - 2- or 3-dose series as above

Special situations

- **Pregnancy through age 26 years**: HPV vaccination is not recommended until after pregnancy; no intervention needed if vaccinated while pregnant; pregnancy testing not needed before vaccination

Structural Changes to Table 1



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Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)			
Varicella (VAR)	2 doses (if born in 1980 or later)		2 doses	
Zoster recombinant (RZV) *(preferred)*			2 doses	
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Haemophilus influenzae type b (Hib)	1 or 3 doses depending on indication			

2 / 6

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…ccination based on shared …clinical decision-making

No recommendation/ Not applicable

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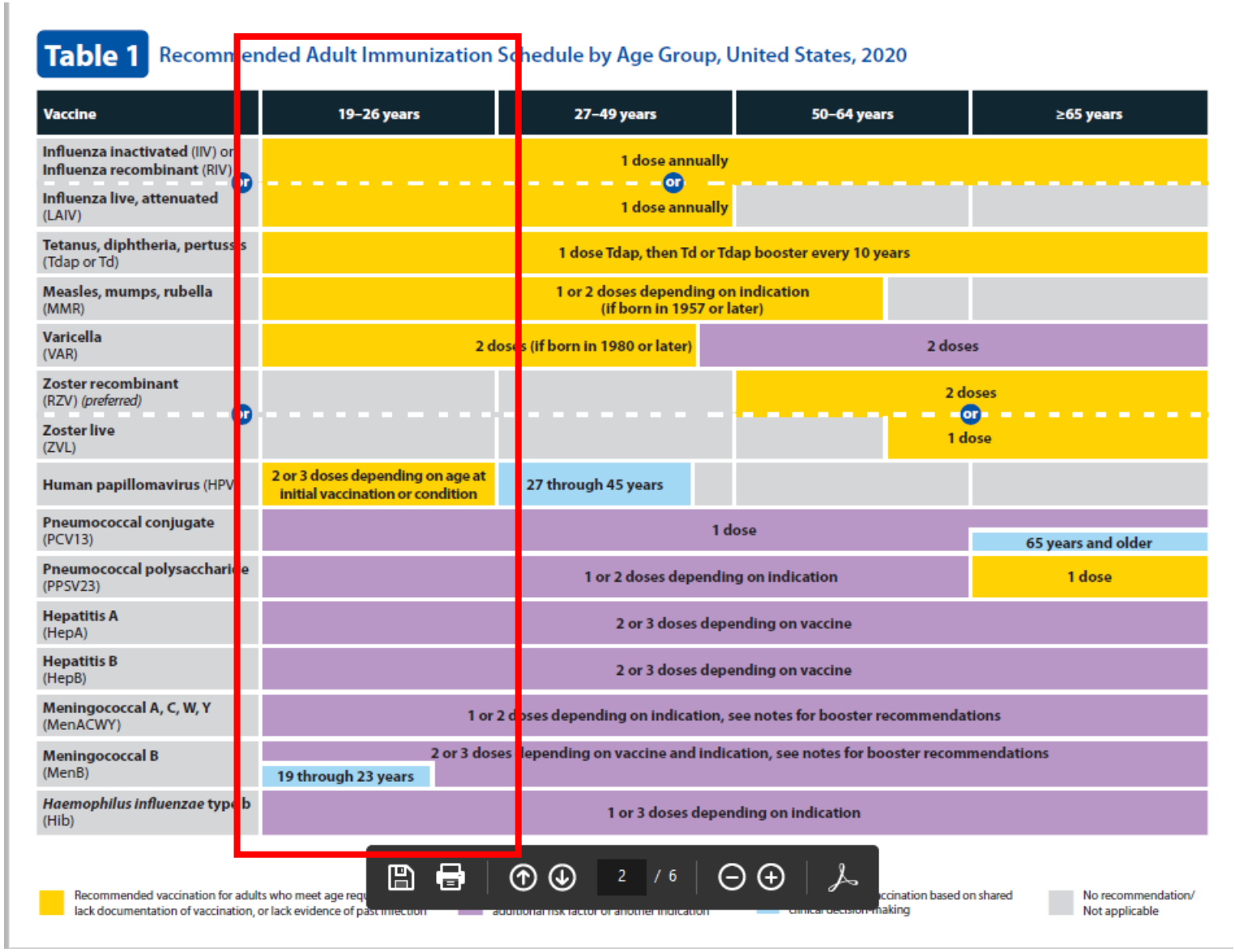

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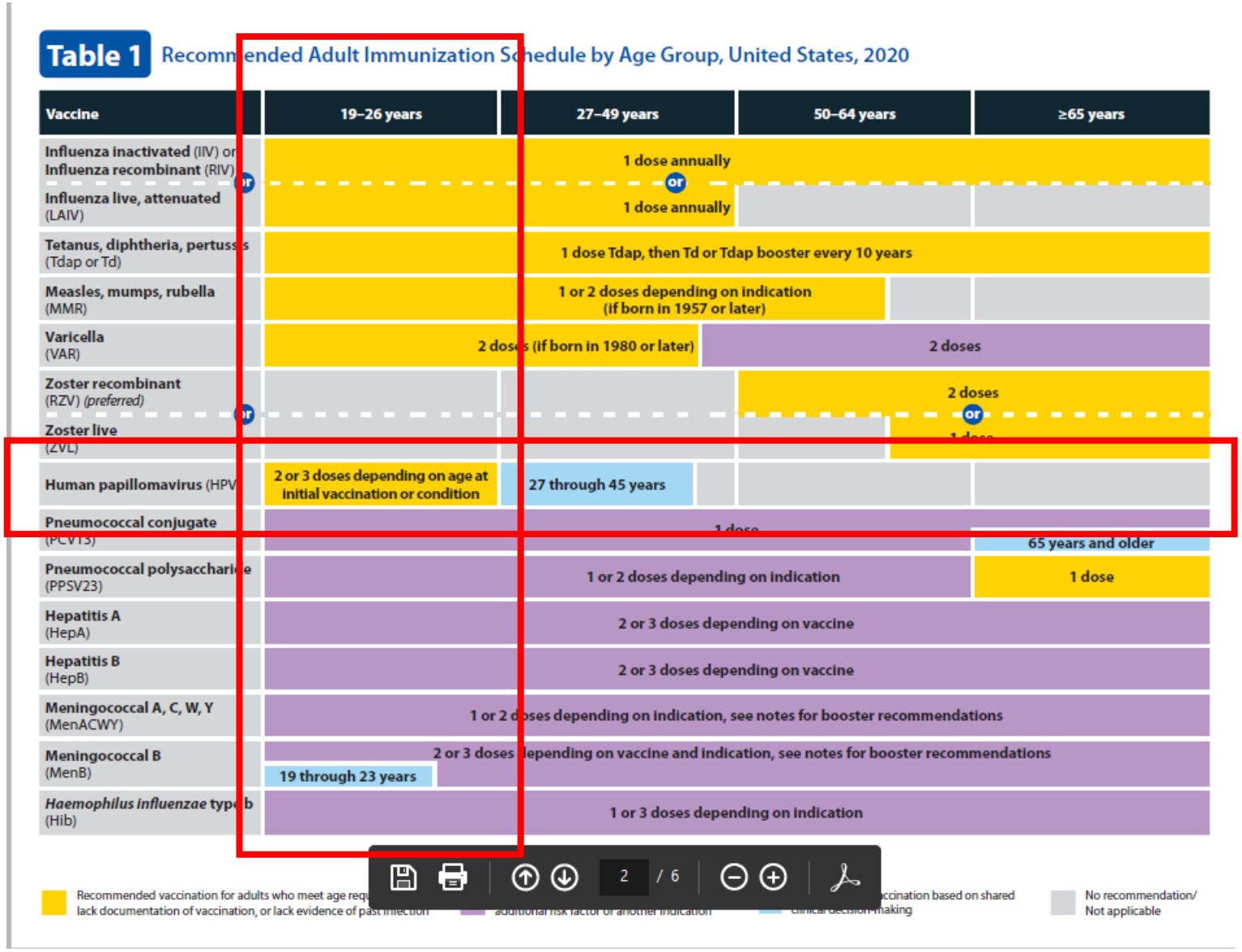

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2 / 6

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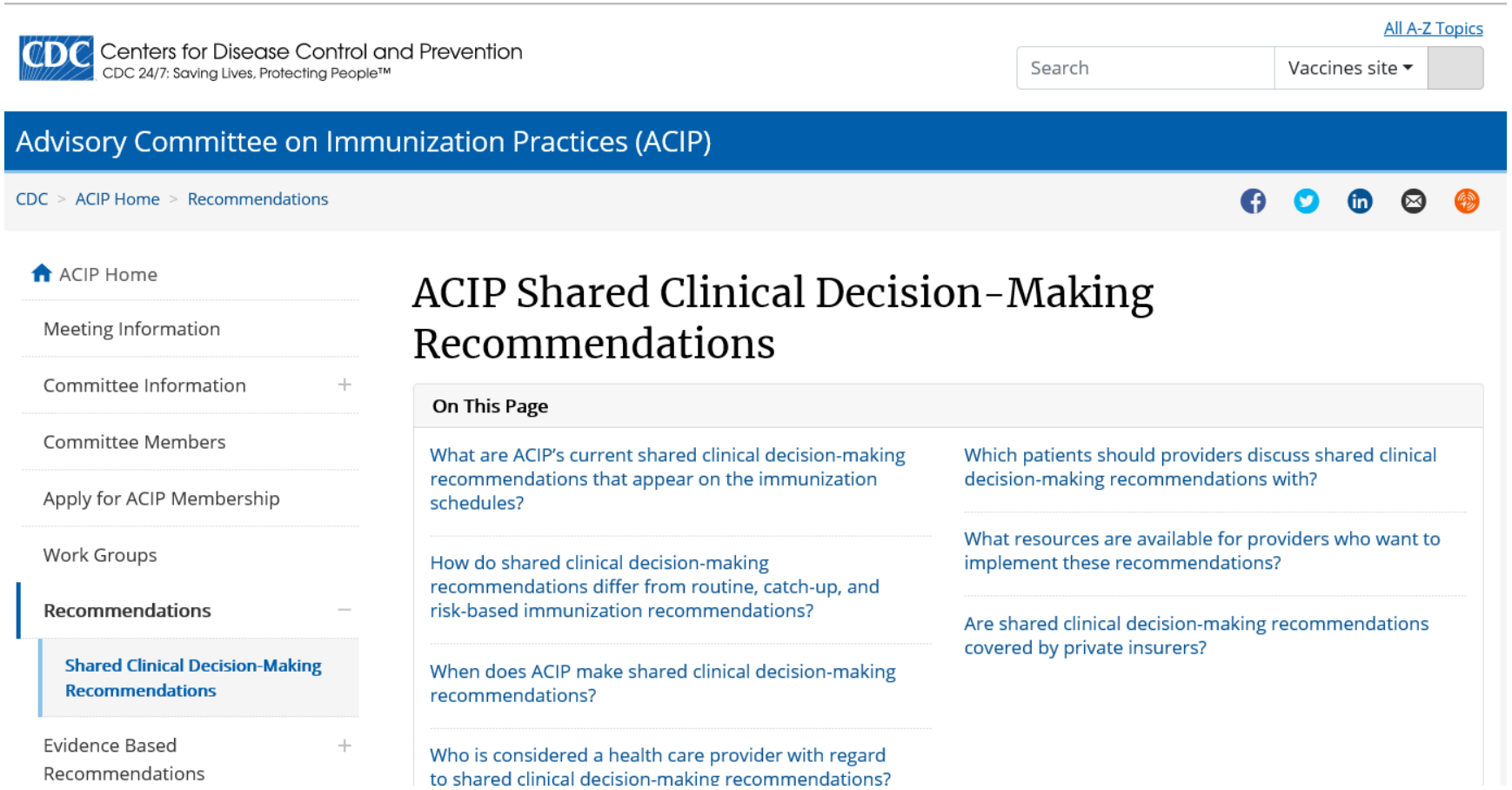
...accination based on shared clinical decision-making

No recommendation/ Not applicable

HPV Vaccine

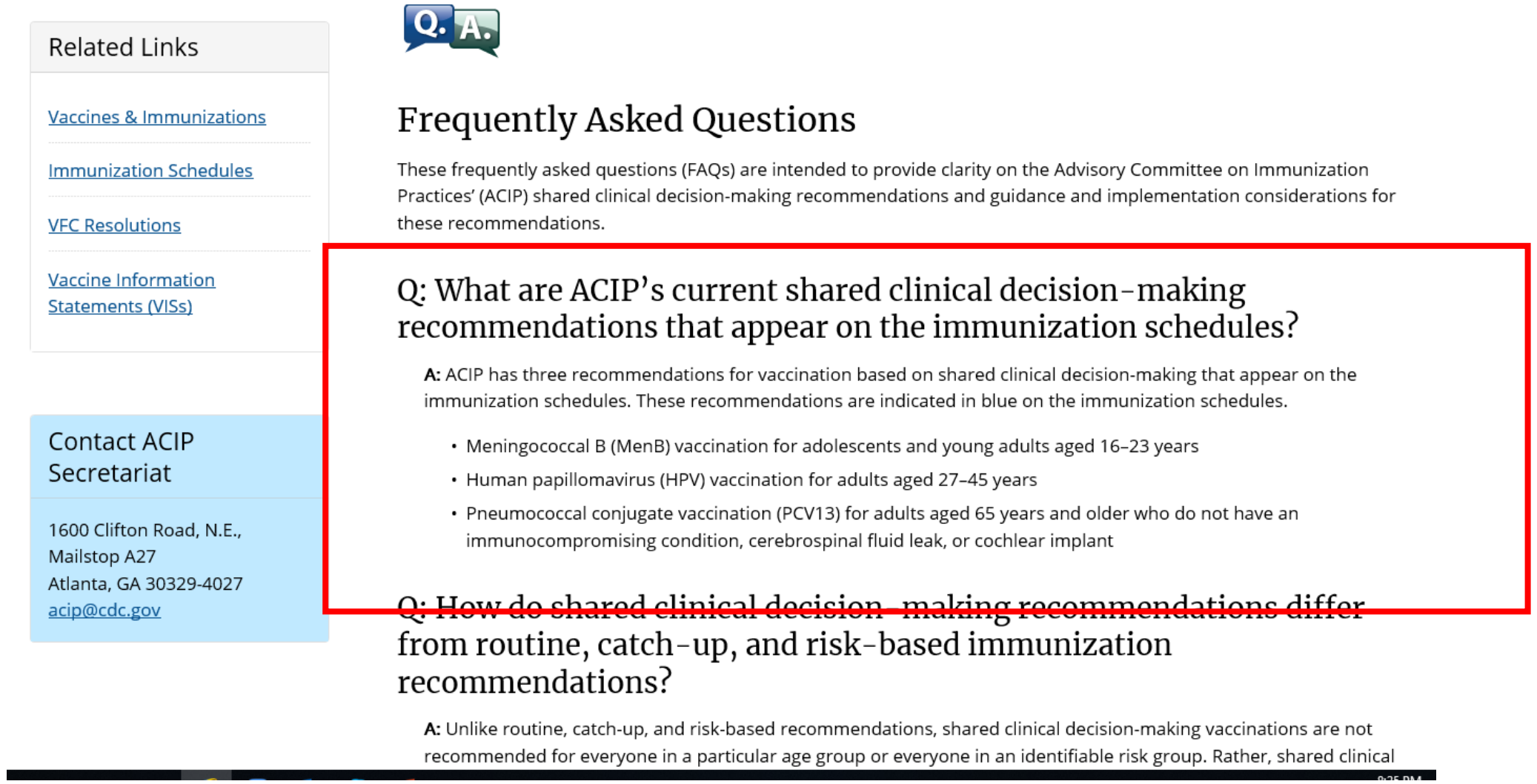
- HPV vaccine is recommended for persons 11 through 26 years of age regardless of gender
- Shared clinical decision-making regarding HPV vaccine is recommended for persons 27 through 45 years of age

Shared Clinical Decision-making



https://www.cdc.gov/vaccines/acip/acip-scdm-faqs.html

Shared Clinical Decision-making



Related Links

Vaccines & Immunizations

Immunization Schedules

VFC Resolutions

Vaccine Information Statements (VISs)

Contact ACIP Secretariat

1600 Clifton Road, N.E.,
Mailstop A27
Atlanta, GA 30329-4027
acip@cdc.gov

Frequently Asked Questions

These frequently asked questions (FAQs) are intended to provide clarity on the Advisory Committee on Immunization Practices' (ACIP) shared clinical decision-making recommendations and guidance and implementation considerations for these recommendations.

Q: What are ACIP's current shared clinical decision-making recommendations that appear on the immunization schedules?

A: ACIP has three recommendations for vaccination based on shared clinical decision-making that appear on the immunization schedules. These recommendations are indicated in blue on the immunization schedules.

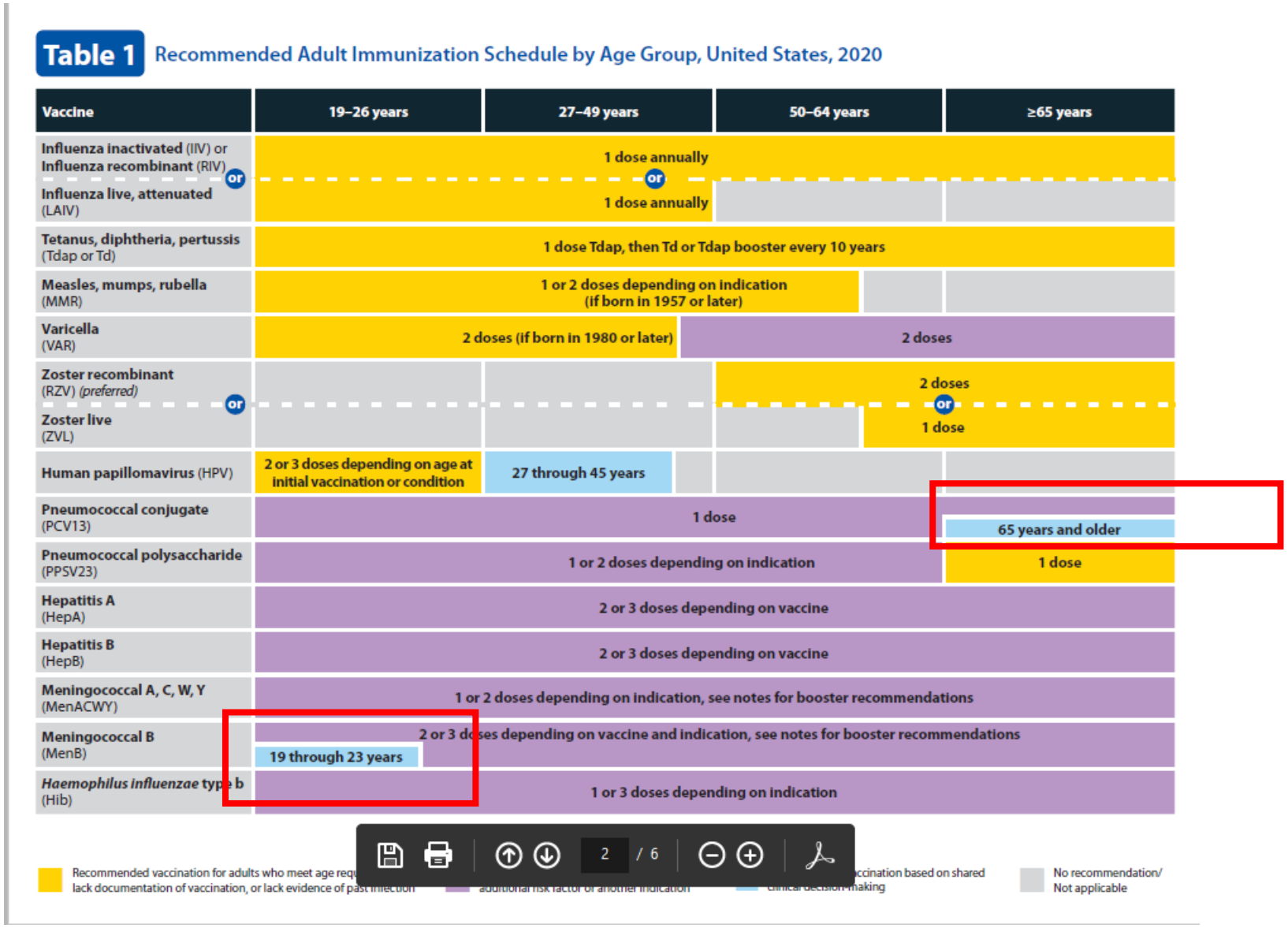
- Meningococcal B (MenB) vaccination for adolescents and young adults aged 16–23 years
- Human papillomavirus (HPV) vaccination for adults aged 27–45 years
- Pneumococcal conjugate vaccination (PCV13) for adults aged 65 years and older who do not have an immunocompromising condition, cerebrospinal fluid leak, or cochlear implant

Q: How do shared clinical decision-making recommendations differ from routine, catch-up, and risk-based immunization recommendations?

A: Unlike routine, catch-up, and risk-based recommendations, shared clinical decision-making vaccinations are not recommended for everyone in a particular age group or everyone in an identifiable risk group. Rather, shared clinical

https://www.cdc.gov/vaccines/acip/acip-scdm-faqs.html

Structural Changes to Table 1



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or **Zoster live** (ZVL)			or 1 dose	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
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…additional risk factor or another indication

…ccination based on shared clinical decision-making

No recommendation/ Not applicable

Vaccine Specific Recommendations

Shared Clinical Decision-Making: HPV Vaccine

- HPV is a very common sexually transmitted infection. Most HPV infections are transient and asymptomatic and cause no clinical problems.
- Although new HPV infections are most commonly acquired in adolescence and young adulthood, some adults are at risk for acquiring new HPV infections. At any age, having a new sex partner is a risk factor for acquiring a new HPV infection.
- Persons who are in a long-term, mutually monogamous sexual partnership are not likely to acquire a new HPV infection.
- Most sexually active adults have been exposed to some HPV types, although not necessarily all of the HPV types targeted by vaccination.
- No clinical antibody test can determine whether a person is already immune or still susceptible to any given HPV type.

MMWR 2019; 68; 698-702

Shared Clinical Decision-Making: HPV Vaccine

- HPV vaccine efficacy is high among persons who have not been exposed to vaccine-type HPV before vaccination.
- Vaccine effectiveness might be low among persons with risk factors for HPV infection or disease (e.g., adults with multiple lifetime sex partners and likely previous infection with vaccine-type HPV), as well as among persons with certain immunocompromising conditions.
- HPV vaccines are prophylactic (i.e., they prevent new HPV infections). They do not prevent progression of HPV infection to disease, decrease time to clearance of HPV infection, or treat HPV-related disease.

MMWR 2019; 68; 698-702

Shared Clinical Decision-Making: PCV13 Vaccine

- PCV13 is a safe and effective vaccine for older adults. The risk for PCV13-type disease among adults aged ≥65 years is much lower than it was before the pediatric program was implemented, as a result of indirect PCV13 effects (by preventing carriage and, thereby, transmission of PCV13-type strains). The remaining risk is a function of each individual patient's risk for exposure to PCV13 serotypes and the influence of underlying medical conditions on the patient's risk for developing pneumococcal disease if exposure occurs.
- The following adults aged ≥65 years are potentially at increased risk for exposure to PCV13 serotypes and might attain higher than average benefit from PCV13 vaccination, and providers/practices caring for many patients in these groups may consider regularly offering PCV13 to their patients aged ≥65 years who have not previously received PCV13:

https://www.cdc.gov/mmwr/volumes/68/wr/pdfs/mm6846a5-H.pdf

Shared Clinical Decision-Making: PCV13 Vaccine

- Persons residing in nursing homes or other long-term care facilities
- Persons residing in settings with low pediatric PCV13 uptake
- Persons traveling to settings with no pediatric PCV13 program
- Incidence of PCV13-type invasive pneumococcal disease and pneumonia increases with increasing age and is higher among persons with chronic heart, lung, or liver disease, diabetes, or alcoholism, and those who smoke cigarettes or who have more than one chronic medical condition. Although indirect effects from pediatric PCV13 use were documented for these groups of adults and were comparable to those observed among healthy adults, the residual PCV13- type disease burden remains higher in these groups. Providers/practices caring for patients with these medical conditions may consider offering PCV13 to such patients who are aged ≥65 years and who have not previously received PCV13.

https://www.cdc.gov/mmwr/volumes/68/wr/pdfs/mm6846a5-H.pdf

Serogroup B Meningococcal Vaccine

- What was category B is now relabled “shared clinical decision-making
- Vaccination of healthy (non-high risk adolescents 16 through 23 years old).

Other Serogroup B Meningococcal Vaccine Updates – Booster Doses

- A booster dose is recommended for high-risk persons 1 year after the primary series, and every 2-3 years thereafter
- High-risk groups
  - Complement component deficiency
  - Complement inhibitor therapy – eculizumab, revulizumab
  - Functional and anatomic asplenia
  - Microbiologists handling commercial specimens

Other Serogroup B Meningococcal Vaccine Updates – Booster Doses

- A booster dose is recommended for persons exposed in an outbreak who previously received a primary series
- Non-high risk groups
  - A booster dose is needed if 1 year has passed since the last dose in the primary series.
  - With provider discretion, an interval of 6 months may be used.

Hepatitis A

Hepatitis A Adult Indications

-Chronic liver disease (e.g., persons with hepatitis B, hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal)
-HIV infection
-Men who have sex with men
-Injection or noninjection drug use
-Persons experiencing homelessnes
-Work with hepatitis A virus in research laboratory or with nonhuman primates with hepatitis A virus infection
-Travel in countries with high or intermediate endemic hepatitis A
-Close, personal contact with international adoptee (e.g., household or regular babysitting) in first 60 days after arrival from country with high or intermediate endemic hepatitis A (administer dose 1 as soon as adoption is planned, at least 2 weeks before adoptee's arrival)
--Settings for exposure, including health care settings targeting services to injection or noninjection drug users or group homes and nonresidential day care facilities for developmentally disabled persons (individual risk factor screening not required)
-~~Clotting factor disorders~~

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Tetanus-reduced-diphtheria Acellular Pertussis Vaccine (Tdap)

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- Someone seven years or older incompletely vaccinated for pertussis should receive a dose of Tdap
- Tdap is recommended for someone currently pregnant (in every pregnancy)
- Tdap is recommended at 11-12 years of age for someone who received a catch-up or inadvertent dose of Tdap at 7-9 years of age

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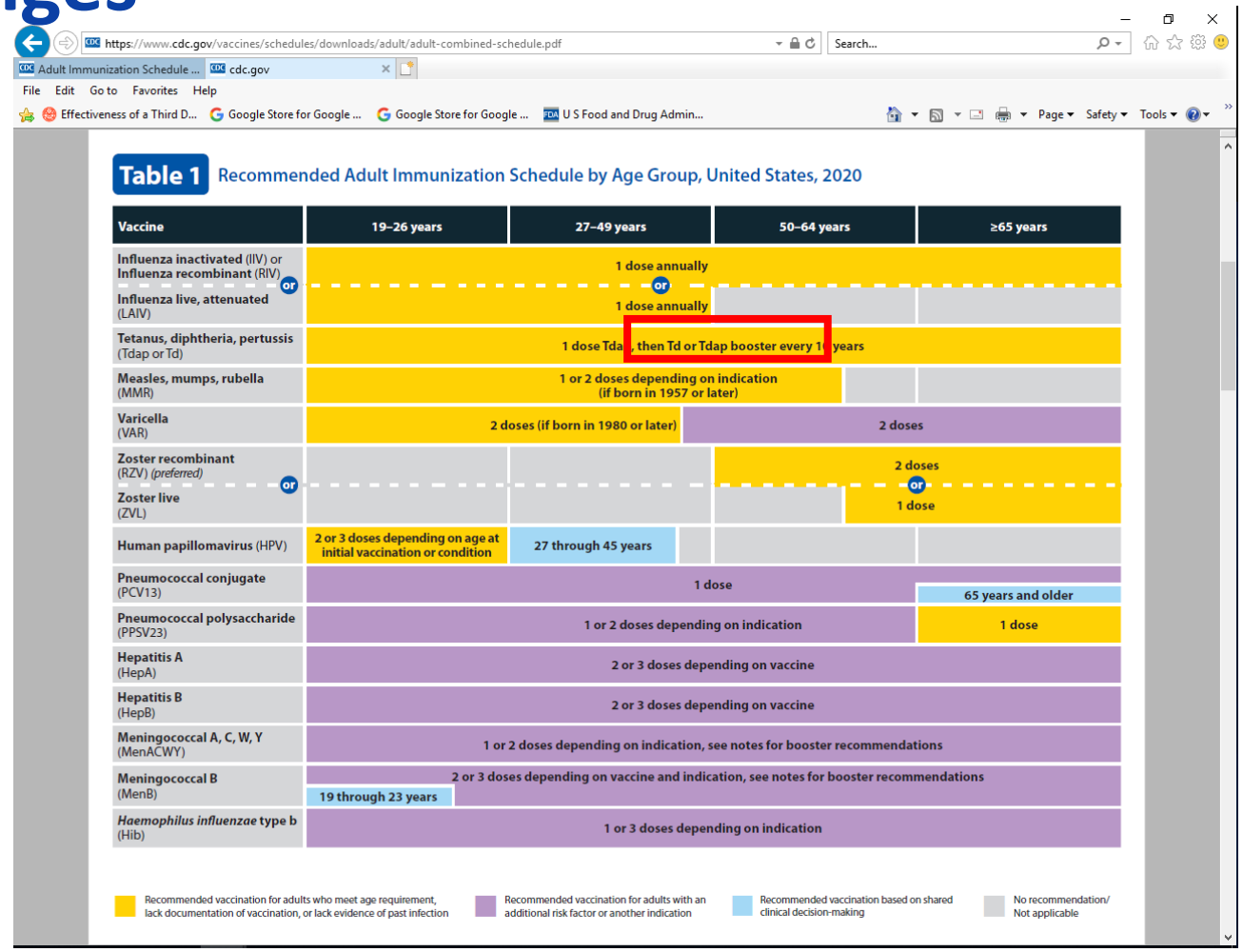
Tetanus-reduced-diphtheria Acellular Pertussis Vaccine (Tdap) - Changes

- Tdap is recommended at 11-12 years of age for someone who received a catch-up or inadvertent dose of Tdap at 7-9 years of age
  - Previously, the catch-up/inadvertent range was 7-10 years of age
  - Now, a dose of Tdap given at 10 years of age counts as the recommended 11-12 year old recommended dose of Tdap

Tetanus-reduced-diphtheria Acellular Pertussis Vaccine (Tdap) - Changes

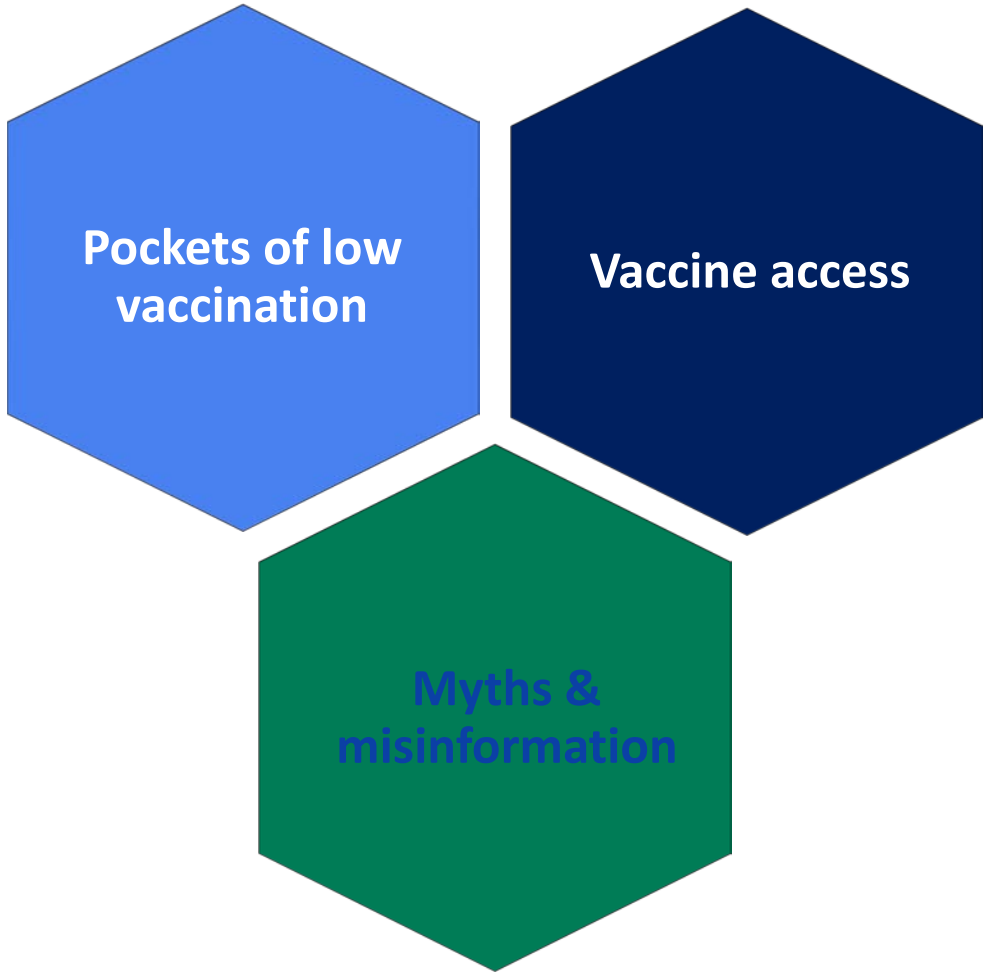


Tetanus-reduced-diphtheria Acellular Pertussis Vaccine (Tdap) - Changes

- For tetanus and/or diphtheria component catch-up, after the first dose is administered as Tdap, future doses can be administered as EITHER Tdap or Td.

Vaccinate with Confidence
cdc.gov/vaccines/partners/vaccinate-with-confidence.html

Vaccinate with Confidence: Responding to dynamics shared by recent outbreaks



Vaccinate with **Confidence**

Protect communities. Empower families. Stop myths.

Vaccinate with Confidence is CDC's strategic framework for strengthening vaccine confidence and preventing outbreaks of vaccine preventable diseases in the United States

Vaccinate with Confidence

Protect communities. Empower families. Stop myths.

Protect communities

Use every tool available to find and protect communities at risk using tailored, targeted approaches

Empower families

Ensure parents are confident in decision to vaccinate by strengthening provider-parent vaccine conversations

Stop myths

Use local partners and trusted messengers, establish new partnerships to contain the spread of misinformation, and educate critical stakeholders about vaccines

Vaccinate with **Confidence**

Protecting communities.

Empowering families.

Stopping myths.

To protect communities from outbreaks, we have to **find the communities that are most vulnerable first**

Vaccinate with **Confidence**

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New Investments and Activities

- Leverage CDC's 2019 Immunization and Vaccines for Children cooperative agreement to support awardee efforts to find and respond to pockets of low vaccine coverage in their jurisdictions
- Use immunization information system data and small-area analyses to pinpoint areas of low vaccination coverage and identify barriers to vaccination
- Build immunization program capacity to effectively respond to outbreaks

Vaccinate with **Confidence**

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To ensure parents are confident in the decision to vaccinate, we need to equip health care professionals with resources to **have effective vaccine conversations**

Vaccinate with **Confidence**

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New Investments and Activities

- Support partners to help vaccine conversations start earlier with parents of very young infants and pregnant women
- Reduce hesitancy and improve vaccine access at the nation's community health centers
- Develop provider toolkit to address parents' vaccine questions during outbreaks of vaccine-preventable diseases

Vaccinate with **Confidence**

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We must **ensure reliable information is not drowned out** by misinformation, **educate key stakeholders** about vaccines, and **engage trusted local messengers** to provide accurate and reliable information about vaccines

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New Investments and Activities

- Work with social media companies to promote trustworthy vaccine information
- Educate state policy makers on vaccine safety and effectiveness
- Engage state and local health officials to advance effective local responses and community-based initiatives to misinformation and hesitancy

Thank you

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov