ACHA Guidelines

Recommendations for Institutional Prematriculation Immunizations

mmunizations offer safe and effective protection from vaccine-preventable diseases. The United States is experiencing re-emergence of these diseases, in part due to factors such as un-immunized and under-immunized persons and global travel. The American College Health Association (ACHA) strongly supports the use of vaccines to protect the health of our individual students and our campus communities. In recognition of the vital role that vaccine coverage plays in community immunity (herd immunity), ACHA discourages use of nonmedical exemptions to required vaccines.

This guidance is provided to facilitate implementation of a comprehensive institutional immunization policy. Best practices for institutions of higher education include following Recommendations for Institutional Prematriculation Immunizations (RIPI) guidelines, encouraging students who request nonmedical exemptions to required vaccines to be

counseled by a health service clinician, and considering exclusion of un-immunized students from school during outbreaks of vaccine-preventable diseases. Institutions may also be to subject to additional requirements for prematriculation vaccinations and the granting of exemptions by state law

The ACHA Vaccine Preventable Diseases Advisory Committee updates this document in accordance with changing public health recommendations. These guidelines follow Advisory Committee on Immunization Practices (ACIP) recommendations published by the U.S. Centers for Disease Control and Prevention (CDC). Links to full information regarding ACIP provisional and final recommendations, including schedules, indications, precautions, and contraindications, are available at the CDC National Immunization Program website: http://www.cdc.gov/vaccines/acip/index.html.

VACCINE	tions to required vaccines to be VACCINATION SCHEDULE	MAJOR INDICATIONS	CONTRAINDICATIONS AND	
VIICOLIAE	(Moon willow Some Sold	MigoRindonio	PRECAUTIONS	
Measles, Mumps, Rubella (MMR)	Two doses of MMR at least 28 days apart after 12 months of age.	All college students born after 1956 without lab evidence of disease.	Pregnancy, history of hyper-sensitivity or anaphylaxis to any of the components in the vaccine. Receipt of blood products and moderate or severe acute infections. Guidelines exist for vaccination of persons with altered immunocompetence.	
		All health care professional students without other evidence of immunity should receive two doses of MMR. Those born before 1957 without other evidence of immunity should receive one dose if not in an outbreak setting and two doses if in an outbreak.		
containing vaccine at least 12 weeks apart if vaccinated between 1 and 12 years of age and at least 4 weeks apart if vaccinated at age 13 years or older.		All college students without other evidence of immunity (e.g., born in the U.S. before 1980, a history of disease, two prior doses of varicella vaccine, or a positive antibody). All health care professional students without a history of disease, with one prior dose of vaccine, or with a negative antibody titer should receive a total of two doses of	Pregnancy, history of hyper-sensitivity or anaphylaxis to any of the components in the vaccine, and severe illness. Guidelines exist for vaccination of persons with altered immunocompetence.	

vaccine.

VACCINE

VACCINATION SCHEDULE

MAJOR INDICATIONS

CONTRAINDICATIONS AND PRECAUTIONS

Tetanus, Diphtheria, Pertussis

- DT: pediatric (<age 7 years) preparation of diphtheria and tetanus toxoids.
- DTaP: pediatric (<age 7 years) preparation of diphtheria, tetanus toxoids, and acellular pertussis.
- DTP (also known as DTwP): pediatric (<age 7 years) preparation of diphtheria, tetanus toxoids, and whole cell pertussis (no longer available in the U.S.).
- Td: 7 years and older preparation of tetanus toxoid and reduced diphtheria toxoid.
- Tdap: adolescent and older preparation of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis.

Primary series in childhood (4 doses: DT, DTaP, DTP, or Td)

Booster doses: For adolescents 11–18 and adults 19–64: single dose of Tdap. Tdap can be administered regardless of interval since the last tetanus or diphtheria toxoid-containing vaccine.

Routine booster dose intervals: Adults should receive decennial Td boosters, beginning 10 years after receiving Tdap.

Tetanus prophylaxis in wound management: For all age groups, patients who require a tetanus toxoid containing vaccine as part of wound management should receive Tdap instead of Td if they have not previously received Tdap. If Tdap is not available or was administered previously, Td should be administered.

All college students. One dose of Tdap for all individuals, ages 11–64, regardless of interval since last Td booster.

In particular, students enrolled in health care professional programs should receive Tdap.

Those adults age 65 years and older who have or anticipate having close contact with an infant aged less than 12 months should receive a single dose of Tdap.

History of hypersensitivity or serious adverse reaction to any of the components in the vaccine.

There is a theoretical risk of increased rates of local or systemic reactions when two diphtheria toxoid-containing vaccines are administered within a short interval (i.e., on different days). Efforts should be made to administer Tdap and tetravalent meningococcal conjugate (MCV4) vaccines simultaneously if both are indicated. If simultaneous vaccination is not feasible, Tdap and MCV4 vaccines (which contain diphtheria toxoid) can be administered in any sequence.

Human Papillomavirus Vaccine Bivalent (HPV2) or Quadrivalent (HPV4) or 9-valent (HPV9) For the bivalent vaccine, females only, three doses at 0, 1, and 6 months

For quadrivalent and 9-valent, Females 11 or 12 years old, females 13–26 years old who have not received the vaccine previously, males 11 or 12 years old, and males 13–21 years old who have not received the vaccine previously: three doses at 0, 1–2, and 6 months for the quadrivalent vaccine.

The 9-valent vaccine may be used to complete the series begun with a different product.

All females 11–26 years old (bivalent, quadrivalent vaccine or 9-valent). All males 11–21 years old, males 11–26 years old who have sex with men, and 11-26 year old males with compromised immune systems (quadrivalent vaccine or 9-valent). Other males 22-26 years old may be vaccinated.

The quadrivalent and 9-valent vaccines are indicated for prevention of cervical cancers and pre-cancers and genital warts. Quadrivalent and 9-valent vaccines are also indicated for use in both females and males for the prevention of anal cancer and anal intraepithelial dysplasia caused by HPV types included in the vaccine. The bivalent vaccine is indicated for prevention of cervical cancers and precancers only.

No HPV or Pap test screening is required prior to administering vaccine; routine cervical cancer screening should continue according to current recommendations. Pregnancy, history of hyper-sensitivity to yeast or to any vaccine component; moderate or severe acute illnesses (defer vaccine until improved); may be given to immunocompromised males and females, but vaccine responsiveness and efficacy may be reduced.

VACCINE	VACCINATION SCHEDULE	MAJOR INDICATIONS	CONTRAINDICATIONS AND PRECAUTIONS	
Hepatitis A Vaccine	Given as a series of 2 doses (given at 0, 6–12 mo.) for age 12 months or greater. *	Recommended for routine use in all adolescents through the age of 18 and in particular for adolescent and adult high-risk groups (i.e., persons traveling to countries where hepatitis A is moderately or highly endemic, men who have sex with men, users of injectable and noninjectable drugs, persons who have clotting-factor disorders, persons working with nonhuman primates, and persons with chronic liver disease).	History of hypersensitivity to any of the components of the vaccine.	
Hepatitis B Vaccine	Given as a series of 3 age appropriate doses (given at 0, 1–2 mo., and 6–12 mo.) at any age. Adolescents ages 11–15 years can be given 2 adult doses (given at 0 and 4-6 mo.).*	All college students. In particular students enrolled in health care professional programs should receive Hepatitis B vaccination.	History of hypersensitivity to any of the components of the vaccine.	
Influenza - Inactivated influenza	Annually (recommendation applies to any and all flu vaccines)	All members of a campus community age 6 months or older should receive annual vaccination.	History of hypersensitivity to any of the components of the vaccine (applies to any and all flu vaccines).	
vaccines: Trivalent (IIV3) or Quadrivalent (IIV4) or Recombinant (RIV3) - Live attenuated influenza vaccine (LAIV; licensed for healthy, nonpregnant persons age 2-49 years).		College students at high risk of complications from the flu due to asthma, diabetes, or certain immunodeficiencies; and students with contact with a high-risk individual.		
		Students enrolled in health care professional programs should receive annual influenza vaccination.		
		Recommendations above apply to any and all flu vaccines.		
Pneumococcal Vaccine - Pneumococcal conjugate vaccine (PCV13, Prevnar13)	Childhood, adolescence, adulthood	Adults with certain medical conditions (see appendix A)	History of hypersensitivity to any of the components of the vaccine.	
- Pneumococcal Polysaccharide Vaccine- 23 (PPSV23, Pneumovax 23)				
Polio	Primary series in childhood with IPV alone, OPV alone, or	IPV for certain international travelers to areas or countries where polio is	s History of hypersensitivity to any of the components of the vaccine.	
- Inactivated (IPV) - Oral poliovirus (OPV no longer available in U.S.)	IPV/OPV sequentially; IPV booster only if needed for travel after age 18 years.	epidemic or endemic.		

VACCINE

VACCINATION SCHEDULE M.

MAJOR INDICATIONS

CONTRAINDICATIONS AND PRECAUTIONS

Meningococcal Quadrivalent (A, C, Y, W-135)

- Conjugate (Preferred)
- Polysaccharide (Acceptable alternative if conjugate not available)

Initial dose of conjugate vaccine: 11-12 yrs of age

Booster dose: 16 yrs of age If initial dose given age 13-15 yrs: booster dose at 16-18 yrs of age

If initial dose given age ≥16 yrs, no booster dose required

Persons with persistent complement component deficiencies (e.g., C5-C9, properidin, factor H, or factor D) or asplenia should receive a 2-dose primary series administered 2 months apart and then receive a booster dose every 5 years. Adolescents aged 11 through 18 years with HIV infection should be routinely vaccinated with a 2-dose primary series. Other persons with HIV who are vaccinated should receive a 2-dose primary series administered 2 months apart. All other persons at increased risk for meningococcal disease (e.g., microbiologists or travelers to an epidemic or highly endemic country) should receive a single primary dose.

For colleges and university with meningococcal vaccine policies as a requirement of enrollment or on-campus living: students <21 years of age should have documentation of a dose of conjugate vaccine at ≥16 years of age. The booster dose can be administered any time after the 16th birthday to ensure that the booster is provided. The minimum interval between doses of meningococcal conjugate vaccine is 8 weeks

Routine vaccination of healthy persons who are not at increased risk for exposure is not recommended after age 21 years. Adolescents 11-18 years of age and other populations at increased risk, **including college students** living in residence halls/similar housing, etc., persons with terminal complement deficiencies or asplenia, laboratory personnel with exposure to aerosolized meningococci, and travelers to hyperendemic or endemic areas of the world. Non-freshmen college students may choose to be vaccinated to reduce their risk of meningococcal disease.**

History of hypersensitivity or serious adverse reaction to any of the components in the vaccine.

Avoid vaccinating persons who are known to have experienced Guillain-Barre (GBS) syndrome.

There is a theoretical risk of increased rates of local or systemic reactions when two diphtheria toxoid-containing vaccines are administered within a short interval (i.e., on different days). Efforts should be made to administer Tdap and tetravalent meningococcal conjugate (MCV4) vaccines simultaneously if both are indicated. If simultaneous vaccination is not feasible, Tdap and MCV4 vaccines (which contain diphtheria toxoid) can be administered in any sequence.

Other recommendations:

^{*}Combined hepatitis A and B vaccines may be given as a series of 3 doses (given at 0, 1-2, and 6-12 mo.) for 18 years of age and older.

^{**}Colleges may target all matriculating freshmen if targeting those in residence halls/similar housing is not feasible.

VACCINE	VACCINATION SCHEDULE	MAJOR INDICATIONS	CONTRAINDICATIONS AND PRECAUTIONS	
Serogroup B Meningococcal	For MenB-4C: 0–2 months For MenB-FHbp: 0–2–6	Category A: Should be administered to:*	Defer in pregnant or lactating females unless at increased risk.	
Vaccines - MenB-4C (Bexsero®,	months	Persons at increased risk due to	History of hypersensitivity to any of the components of the vaccine.	
2 dose series)		 Outbreaks of serogroup B meningococcal disease 	Bexsero®: use with caution if	
- MenB-FHbp (Trumenba [®] , 3 dose		Persistent complement component	hypersensitive to latex.	
series)		deficiencies	The two vaccines are not interchangeable, so the same product	
		 Treatment with eculizumab for hemolytic uremic syndrome or paroxysmal nocturnal hemoglobinuria 	must be used for all doses.	
		Anatomic or functional asplenia including sickle cell disease		
		Laboratory workers routinely exposed to isolates of <i>N. meningitis</i>		
		Category B: May be administered to:**		
		Adolescents and young adults 16–23 for short term protection (preferred age 16–18)		
		Serogroup B vaccines may be administered with Men ACW but at different anatomic site, if possible. Defer in pregnant or lactating females unless at increased risk.		

Other recommendations:

Immunization requirements and recommendations for international travel may vary, depending on personal medical history and travel destination. Anyone anticipating international travel should contact a health care provider for specific information.

Prepared by ACHA's Vaccine-Preventable Diseases Advisory Committee



^{*}Category A: Recommendations made for all persons in age or risk-factor group.

^{**}Category B: Recommendations are made using individual clinical decision-making

APPENDIX A

Medical Conditions or Other Indications for Administration of 13-valent Pneumococcal Conjugate Vaccine (PCV13) and Indications for 23-valent Pneumococcal Polysaccharide Vaccine (PPSV23)

Underlying condition	PPSV23	PCV 13	Revaccination 5 years after first dose
 cigarette smoking chronic heart or lung disease diabetes mellitus alcoholism cirrhosis liver disease 	X		
CSF leakcochlear implant		x	
 sickle disease congenital or acquired asplenia HIV positive congenital or acquired immunodeficiency chronic renal failure nephrotic syndrome leukemia lymphoma Hodgkins, generalized malignancy iatrogenic immunosuppression solid organ transplant, multiple myeloma 	X	X	X

Source: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6434a4.htm

SAMPLE IMMUNIZATION RECORD

This is a SAMPLE immunization record form. If reproduced for use by a college or university health center, please insert your health center's contact information. This form should not be returned to ACHA.

PART	I						
Name First Name				Middle Name			
				Last Name			
Address		Street		City		State	Zip
Date of	Entry/	Date of BirthM	//	-			
Status:	Part-time	Full-time	Graduate _	Undergradua	te	Professional	
PART	II: TO BE COMI	PLETED AND SIG	GNED BY	YOUR HEALTH (CARE PRO	VIDER.	
All info	ormation must be in I	English.					
A. MN	MR (MEASLES, M	IUMPS, RUBELL	A)				
(Two do	oses required at least 28	days apart for students	born after 195	56 and all health care pro	fessional stude	ents.)	
1. D	ose 1 given at age 12 m	nonths or later			#1/	/Y	
2. D	2. Dose 2 given at least 28 days after first dose						
B. ME	NINGOCOCCAL	QUADRIVALE!	NT				
(A, C	C, Y, W-135) One or 2 of	doses for all college stu	dents; revacci	nate every 5 years if incre	eased risk cont	inues.	
1.	Quadrivalent conjuga	te (preferred; administe	er simultaneou	sly with Tdap if possible).		
	a. Dose #1/	/ b. Dose #	#2//	<u>Y</u>			
2.	Quadrivalent polysac	charide (acceptable alte	ernative if conj	jugate not available).			
	Date/////						
C. TE	TANUS, DIPHTH	ERIA, PERTUSS	IS				
1. P	rimary series completed	1? Yes No	-	Date of <u>last</u> dose in seri	es://_	Y	
2. D	eate of most recent boos	ter dose://_		Type of booster: Td			indicated
D. HE	PATITIS B						
	ege and health care pro hepatitis B surface anti			ccine or two doses of adu	alt vaccine in a	dolescents 11–15 ye	ears of age, or a
1.	Immunization (hepati	tis B)					
	a. Dose #1//	Y	b. Dose #2	/	c. Do	se #3//	<u> </u>
	Adult formulation	Child formulation	Adult formulat	tion Child formulation _	Adult f	Formulation Child	formulation
2.	Immunization (Comb	ined hepatitis A and B	vaccine)				
				c. Dose #3/_			
3.	Hepatitis B surface ar	ntibody Date/_	/Y	Result: Reactive	Non	ı-reactive	

E. INFLUENZA

Trivalent (IIV3) _____ Quadrivalent (IIV4) _____ Recombinant (RIV3) _____ Live attenuated influenza vaccine (LAIV) _____ Date of last dose: ____/__/__

F. VARICELLA

(Birth in the U.S. before 1980, a history of chicken pox, a positive varicella antibody, or two doses of vaccine meets the requirement.)

- 1. History of Disease Yes ___ No ___ or Birth in U.S. before 1980 Yes ___ No ___
- 2. Varicella antibody ___/__/ Result: Reactive ____ Non-reactive ____
- 3. Immunization

 - b. Dose #2 given at least 12 weeks after first dose ages 1–12 years...............................#2 ___/__/___and at least 4 weeks after first dose if age 13 years or older. M D Y

G. HUMAN PAPILLOMAVIRUS VACCINE (HPV2/HPV4/HPV9)

(Three doses of vaccine for females and males 11-26 years of age at 0, 1-2, and 6 month intervals.)

Immunization (indicate which preparation, if known) Quadrivalent (HPV4) _____ or Bivalent (HPV2) ____ or 9-valent (HPV9) ____

a. Dose #1 ____/____ b. Dose #2 ___/__/__ c. Dose #3 ___/__/__

H. HEPATITIS A

- 1. Immunization (hepatitis A)
 - a. Dose #1 ____/____ b. Dose #2 ____/___/
- 2. Immunization (Combined hepatitis A and B vaccine)
 - a. Dose #1 ____/___ b. Dose #2 ___/__/ c. Dose #3 ___/__/

I. PNEUMOCOCCAL POLYSACCHARIDE VACCINE

PCV 13 _____ Date __/__/ __ PPSV 23 ____ Date __/_/ __

J. MENINGOCOCCAL SEROUGROUP B

(Two or three dose series; may be given to any college student or for outbreak control; may be given with quadrivalent meningococcal vaccine at different anatomic site. Must complete series with the same vaccine.)

1. MenB-RC (Bexsero) __routine ___outbreak -related

a. Dose #1___/__/ b. Dose #2. ___/_ /___

OR

- 1. MenB-FHbp (Trumenba) __routine ___outbreak-related
 - a. Dose #1 ___/__/ b. Dose #2 ___/_/ c. Dose #3 __/_/_

I. POLIO

(Primary series, doses at least 28 days apart. Three primary series are acceptable. See ACIP website for details.)

- 3. IPV alone (injected Salk four doses): #1 __/__/ #2 __/_/ #3 __/_/ #3 __/_/ #4 __/_/___

M. TUBERCULOSIS (TB) SCREENING/TESTING¹

Please answer the following q	uestions:				
Have you ever had close conta	act with persons known or suspect	ed to have active TB disease?		☐ Yes	□ No
Were you born in one of the coaff yes, please CIRCLE the co	countries or territories listed below buntry, below)	that have a high incidence of act	ive TB disease?	☐ Yes	□ No
	Congo Côte d'Ivoire Democratic People's Republic of Korea Democratic Republic of the Congo Djibouti Dominican Republic Ecuador El Salvador Equatorial Guinea Eritrea Estonia Ethiopia Fiji French Polynesia Gabon Gambia Georgia Ghana Greenland Guam Guatemala Guinea-Bissau Guyana Haiti Honduras India Indonesia		Namibia Nauru Nepal Nicaragua Niger Nigeria Northern Mariana Islands Pakistan Palau Panama Papua New Guinea Paraguay Peru Philippines Poland Portugal Qatar Republic of Korea Republic of Moldova Romania Russian Federation Rwanda Saint Vincent and the Grenadines Sao Tome and Principe Senegal Serbia Seychelles Sierra Leone Singapore Countries and territories with inces	Solomon Island Somalia South South Sudan Sri Lanka Sudan Suriname Swaziland Tajikistan Thailand Timor-Leste Togo Trinidad and To Tunisia Turkmenistan Tuvalu Uganda Ukraine United Republic Tanzania Uruguay Uzbekistan Vanuatu Venezuela (Bol Republic of) Viet Nam Yemen Zambia Zimbabwe	Africa obago c of livarian
	longed visits* to one or more of the countries or territories, above)	e countries or territories listed ab	ove with a high prevalence of	☐ Yes	□ No
Have you been a resident and facilities, and homeless shelte	/or employee of high-risk congregars)?	ate settings (e.g., correctional fac	ilities, long-term care	☐ Yes	□ No
Have you been a volunteer or	health care worker who served clie	ents who are at increased risk for	active TB disease?	☐ Yes	□ No
	er of any of the following groups t : medically underserved, low-inco			☐ Yes	□ No
	S to any of the above questions, [i		ne] requires that you receive TE	B testing as soon a	as
If the answer to all o	of the above questions is NO, no f	further testing or further action is	required.		
* The significance of t	the travel exposure should be discu	ussed with a health care provider	and evaluated.		

¹The American College Health Association has published guidelines on "Tuberculosis Screening and Targeted Testing of College and University Students." To obtain the guidelines, visit http://www.acha.org/Guidelines.

TUBERCULOSIS (TB) RISK ASSESSMENT (to be completed by health care provider)

Clinicians should review and verify the information above. Persons answering YES to any of the questions in Part M are candidates for either Mantoux tuberculin skin test (TST) or Interferon Gamma Release Assay (IGRA), unless a previous positive test has been documented.

History of a positive TB skin test or IGRA blood test? (If yes, document bel	ow) Yes No
History of BCG vaccination? (If yes, consider IGRA if possible.)	Yes No
1. TB Symptom Check	_
Does the student have signs or symptoms of active pulmonary tubercule	osis disease? Yes No If No, proceed to 2 or 3
If yes, check below:	
 □ Cough (especially if lasting for 3 weeks or longer) with or without spr □ Coughing up blood (hemoptysis) □ Chest pain □ Loss of appetite □ Unexplained weight loss □ Night sweats □ Fever 	
Proceed with additional evaluation to exclude active tuberculosis disease in evaluation as indicated.	cluding tuberculin skin testing, chest x-ray, and sputum
2. Tuberculin Skin Test (TST) (TST result should be recorded as actual millimeters (mm) of induration, trainterpretation should be based on mm of induration as well as risk factors.)*	
Date Given:/ Date Read:// M D Y	
Result: mm of induration **Interpretation: positive ne	egative
Date Given:/ Date Read://	
Date Given:/ Date Read:// M D Y Result: mm of induration **Interpretation: positive ne	egative
**Interpretation guidelines	
>5 mm is positive: Recent close contacts of an individual with infectious TB persons with fibrotic changes on a prior chest x-ray, consistent with pas organ transplant recipients and other immunosuppressed persons (inclu	
 >10 mm is positive: recent arrivals to the U.S. (<5 years) from high prevalence areas or when injection drug users mycobacteriology laboratory personnel residents, employees, or volunteers in high-risk congregate settings persons with medical conditions that increase the risk of progression to failure, certain types of cancer (leukemias and lymphomas, cancers of weight loss of at least 10% below ideal body weight. 	TB disease including silicosis, diabetes mellitus, chronic renal
>15 mm is positive: • persons with no known risk factors for TB who, except for certain testitested.	
* The significance of the travel exposure should be discussed with a health	care provider and evaluated.
3. Interferon Gamma Release Assay (IGRA)	
Date Obtained:// (specify method) QFT-GIT T-Sp	pot other
Result: negative positive indeterminate borderline (T-Spot only)
Date Obtained:// (specify method) QFT-GIT T-Sp	oot other
Result: negative positive indeterminate borderline (T-Spot only)

4. Chest x-ray: (Required if TST or IGRA is	s positive)
Date of chest x-ray:// Result: r	normal abnormal
Management of Positive TST or IGRA	
	igns of active disease on chest x-ray should receive a recommendation to be treated for latent in the following groups are at increased risk of progression from LTBI to TB disease and possible.
disease	the past 2 years) 3 disease, including persons with fibrotic changes on chest radiograph consistent with prior TB tumor necrosis factor-alpha (TNF) antagonists, systemic corticosteroids equivalent to/greater
than 15 mg of prednisone per day, or immunos	uppressive drug therapy following organ transplantation conic renal failure, leukemia, or cancer of the head, neck, or lung
 Populations defined locally as having an increased oppulations 	d incidence of disease due to <i>M. tuberculosis</i> , including medically underserved, low-income
Student agrees to receive treatment	
Student declines treatment at this time	
HEALTH CARE PROVIDER	Signature
Address	
	END of SAMPLE FORM
If reproduced for use by a college of	or university health center, please insert your health center's contact information. This form should not be returned to ACHA.

Prepared by ACHA's Vaccine-Preventable Diseases Advisory Committee

