ACHA Guidelines

Recommendations for Institutional Prematriculation Immunizations

The following recommendations are provided to colleges and universities to facilitate the implementation of a comprehensive institutional prematriculation immunization policy. Vaccine-preventable diseases continue to occur on and near campuses. In response to changing epidemiology and the introduction of new vaccines, the ACHA Vaccine Preventable Diseases Advisory Committee monitors age-appropriate public health recommendations and updates this document accordingly.

The committee recognizes that many colleges and universities are mandated by state law to require certain vaccinations for matriculating students. States and educational institutions may require fewer or more vaccines, while some may only recommend certain vaccinations. This document is intended as a guideline that is consistent with the Advisory Committee on Immunization Practices (ACIP) recommendations published by the U.S. Centers for Disease Control and Prevention (CDC). Links to complete information regarding ACIP provisional and final comprehensive recommendations, including schedules, indications, precautions, and contraindications, are available at the CDC National Immunization Program website: http://www.cdc.gov/vaccines/recs/acip/default.htm.

VACCINE	VACCINATION SCHEDULE	MAJOR INDICATIONS	CONTRAINDICATIONS AND 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 or physician diagnosed disease. 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.	Pregnancy, history of hypersensitivity 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.
Polio *- Inactivated (IPV)* *- Oral poliovirus (OPV-no longer available in U.S.)*	Primary series in childhood with IPV alone, OPV alone, or IPV/OPV sequentially; IPV booster only if needed for travel after age 18 years.	IPV for certain international travelers to areas or countries where polio is epidemic or endemic.	History of hypersensitivity to any of the components of the vaccine.
Varicella	Two doses of varicella-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 vaccine.	Pregnancy, history of hypersensitivity or anaphylaxis to any of the components in the vaccine, and severe illness. Guidelines exist for vaccination of persons with altered immunocompetence.

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, until guidance on subsequent Tdap booster doses is available. **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.	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)	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. For the bivalent vaccine, females only, three doses at 0, 1, and 6 months.	All females 11-26 years old (bivalent or quadrivalent vaccine). 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). Other males 22-26 years old may be vaccinated. The quadrivalent vaccine is indicated for prevention of cervical cancers and pre-cancers and genital warts. Quadrivalent vaccine is 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 recommend-ations.	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 age 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.
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 anytime 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. Nonfreshmen 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
Influenza *- Trivalent inactivated influenza vaccine (TIV)* *- Live attenuated influenza vaccine (LAIV; licensed for healthy, nonpregnant persons age 2-49 years).*	Annually	All members of a campus community age 6 months or older should receive annual vaccination. College students at high risk of complications from the flu such as students who have asthma, diabetes, or students with certain immuno-deficiencies; and students with contact with a high-risk individual. Students enrolled in health care professional programs should receive annual influenza vaccination.	History of hypersensitivity to any of the components of the vaccine.
Pneumococcal Polysaccharide Vaccine-23 valent	Childhood, adolescence, adulthood	Young adults with certain medical conditions: chronic pulmonary disease (including asthma and current history of smoking for college students 19 to 64 years old); chronic cardiovascular disease; diabetes mellitus; chronic liver diseases, including liver disease as a result of alcohol abuse (e.g. cirrhosis); chronic alcoholism, chronic renal failure, or nephrotic syndrome; functional or anatomic asplenia (e.g. sickle cell disease or splenectomy [if elective splenectomy is planned, vaccinate at least 2 weeks before surgery]); immunosuppressive conditions; and cochlear implants and cerebrospinal fluid leaks. Vaccinate as close to HIV diagnosis as possible. Other indications: certain Alaska Natives and American Indian populations and residents of nursing homes or other long-term care facilities. One-time revaccination after 5 years for persons with chronic renal failure or nephrotic syndrome; functional or anatomic asplenia (e.g. sickle cell disease or splenectomy); or immunosuppressive conditions. For persons aged > 65 years, one-time revaccination if they were vaccinated > 5 years previously and were aged <65 years at the time of primary vaccination.	History of hypersensitivity to any of the components of the vaccine.

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.

American College Health Association
1362 Mellon Road, Suite 180, Hanover, MD 21076
(410) 859-1500 / www.acha.org

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 Birth ____/____/_____ School ID# _____
M Y M D Y

Status: Part-time _____ Full-time _____ Graduate _____ Undergraduate _____ Professional _____

PART II – TO BE COMPLETED AND SIGNED BY YOUR HEALTH CARE PROVIDER.

All information must be in English.

A. MMR (MEASLES, MUMPS, RUBELLA)

(Two doses required at least 28 days apart for students born after 1956 and all health care professional students.)

1. Dose 1 given at age 12 months or later . ..... #1 ____/____/_____
M D Y
2. Dose 2 given at least 28 days after first dose . ..... #2 ____/____/_____
M D Y

B. POLIO

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

1. OPV alone (oral Sabin three doses): #1 ____/____/_____ #2 ____/____/_____ #3 ____/____/_____
M D Y M D Y M D Y
2. IPV/OPV sequential: IPV #1 ____/____/_____ IPV #2 ____/____/_____ OPV #3 ____/____/_____ OPV #4 ____/____/_____
M D Y M D Y M D Y M D Y
3. IPV alone (injected Salk four doses): #1 ____/____/_____ #2 ____/____/_____ #3 ____/____/_____ #4 ____/____/_____
M D Y M D Y M D Y M D Y

C. 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 _____
M D Y
3. Immunization
   a. Dose #1 . ..... #1 ____/____/_____
   M D Y
   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

D. TETANUS, DIPHTHERIA, PERTUSSIS

1. Primary series completed? Yes ___ No ___

   Date of last dose in series: ____/____/_____
   M D Y
2. Date of most recent booster dose: ____/____/_____
   M D Y

   Type of booster: Td _____ Tdap _____

   Tdap booster recommended for ages 11-64 unless contraindicated.

(continued)

SAMPLE IMMUNIZATION RECORD (CONTD.)

E. HUMAN PAPILLOMAVIRUS VACCINE (HPV2 or HPV4)

(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) Quadrivalent (HPV4) _____ or Bivalent (HPV2) _____

a. Dose #1 ____/____/_____ b. Dose #2 ____/____/_____ c. Dose #3 ____/____/_____
M D Y M D Y M D Y

F. INFLUENZA

Date of last dose: ____/____/_____
M D Y

Trivalent inactivated influenza vaccine (TIV) _____ Live attenuated influenza vaccine (LAIV) _____

G. HEPATITIS A

1. Immunization (hepatitis A)

   a. Dose #1 ____/____/_____ b. Dose #2 ____/____/_____
   M D Y M D Y

2. Immunization (Combined hepatitis A and B vaccine)

   a. Dose #1 ____/____/_____ b. Dose #2 ____/____/_____ c. Dose #3 ____/____/_____
   M D Y M D Y M D Y

H. HEPATITIS B

(All college and health care professional students. Three doses of vaccine or two doses of adult vaccine in adolescents 11-15 years of age, or a positive hepatitis B surface antibody meets the requirement.)

1. Immunization (hepatitis B)

   a. Dose #1 ____/____/_____ b. Dose #2 ____/____/_____ c. Dose #3 ____/____/_____
   M D Y M D Y M D Y

   Adult formulation ____ Child formulation ____ Adult formulation ____ Child formulation ____ Adult formulation ____ Child formulation ____

2. Immunization (Combined hepatitis A and B vaccine)

   a. Dose #1 ____/____/_____ b. Dose #2 ____/____/_____ c. Dose #3 ____/____/_____
   M D Y M D Y M D Y

3. Hepatitis B surface antibody Date ____/____/_____ Result: Reactive _____ Non-reactive _____
   M D Y

I. PNEUMOCOCCAL POLYSACCHARIDE VACCINE

(One dose for members of high-risk groups.)

Date ____/____/_____
M D Y

J. MENINGOCOCCAL QUADRIVALENT

(A, C, Y, W-135) One or 2 doses for all college students – revaccinate every 5 years if increased risk continues.

1. Quadrivalent conjugate (preferred; administer simultaneously with Tdap if possible).

   a. Dose #1 ____/____/_____ b. Dose #2 ____/____/_____
   M D Y M D Y

2. Quadrivalent polysaccharide (acceptable alternative if conjugate not available).

   Date ____/____/_____
   M D Y

(continued)

SAMPLE IMMUNIZATION RECORD (CONTD.)

K. TUBERCULOSIS (TB) SCREENING/TESTING[1]

Please answer the following questions:

Have you ever had a positive TB skin test? Yes _____ No _____

Have you ever had close contact with anyone who was sick with TB? Yes _____ No _____

Were you born in one of the countries listed below and arrived in the U.S. within the past 5 years? Yes _____ No _____
(If yes, please circle the country)

Have you ever traveled* to/in one or more of the countries listed below? Yes _____ No _____
(If yes, please check the country/ies)

Have you ever been vaccinated with BCG? Yes _____ No _____

**The significance of the travel exposure should be discussed with a health care provider and evaluated.*

Afghanistan	Congo	Japan	Niger	Swaziland
Algeria	Côte d'Ivoire	Kazakhstan	Nigeria	Syrian Arab Republic
Angola	Croatia	Kenya	Pakistan	Tajikistan
Argentina	Democratic People's Republic of Korea	Kiribati	Palau	Thailand
Armenia	Democratic Republic of the Congo	Kuwait	Panama	The former Yugoslav Republic of Macedonia
Azerbaijan	Djibouti	Kyrgyzstan	Papua New Guinea	Timor-Leste
Bahrain	Dominican Republic	Lao People's Democratic Republic	Paraguay	Togo
Bangladesh	Ecuador	Latvia	Peru	Tunisia
Belarus	El Salvador	Lesotho	Philippines	Turkey
Belize	Equatorial Guinea	Liberia	Poland	Turkmenistan
Benin	Eritrea	Libyan Arab Jamahiriya	Portugal	Tuvalu
Bhutan	Estonia	Lithuania	Qatar	Uganda
Bolivia (Plurinational State of)	Ethiopia	Madagascar	Republic of Korea	Ukraine
Bosnia and Herzegovina	Fiji	Malawi	Republic of Moldova	United Republic of Tanzania
Botswana	Gabon	Malaysia	Romania	Uruguay
Brazil	Gambia	Maldives	Russian Federation	Uzbekistan
Brunei Darussalam	Georgia	Mali	Rwanda	Vanuatu
Bulgaria	Ghana	Marshall Islands	Saint Vincent and the Grenadines	Venezuela (Bolivarian Republic of)
Burkina Faso	Guam	Mauritania	Sao Tome and Principe	Viet Nam
Burundi	Guatemala	Mauritius	Senegal	Yemen
Cambodia	Guinea	Micronesia (Federated States of)	Seychelles	Zambia
Cameroon	Guinea-Bissau	Mongolia	Sierra Leone	Zimbabwe
Cape Verde	Guyana	Morocco	Singapore	
Central African Republic	Haiti	Mozambique	Solomon Islands	
Chad	Honduras	Myanmar	Somalia	
China	India	Namibia	South Africa	
Colombia	Indonesia	Nepal	Sri Lanka	
Comoros	Iraq	Nicaragua	Sudan	
			Suriname	

Source: World Health Organization, Global Health Observatory, Tuberculosis Incidence 2010. Countries with incidence rates of ≥ 20 cases per 100,000 popul ation. For future updates, refer to http://apps.who.int/ghodata

If the answer is YES to any of the above questions, _____ requires
Insert the name of your college/university
that a health care provider complete a tuberculosis risk assessment (to be completed within 6 months prior to the start of classes).

If the answer is to all of the above questions is NO, no further testing or further action is required.

[1]The 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/For_Members/Policy_Guideline_index.cfm.

(continued)

SAMPLE IMMUNIZATION RECORD (CONTD.)

TUBERCULOSIS (TB) RISK ASSESSMENT

Persons with any of the following risk factors are candidates for either Mantoux tuberculin skin test (TST) or Interferon Gamma Release Assay (IGRA), unless a previous positive test has been documented:

Recent close contact with someone with infectious TB disease Yes _____ No _____

Foreign-born from (or travel* to/in) a high-prevalence area (e.g., Africa, Asia, Eastern Europe, or Central or South America)
Yes _____ No _____

Fibrotic changes on a prior chest x-ray suggesting inactive or past TB disease Yes _____ No _____

HIV/AIDS Yes _____ No _____

Organ transplant recipient Yes _____ No _____

Immunosuppressed (equivalent of > 15 mg/day of prednisone for >1 month or TNF-α antagonist) Yes _____ No _____

History of illicit drug use Yes _____ No _____

Resident, employee, or volunteer in a high-risk congregate setting (e.g., correctional facilities, nursing homes, homeless shelters, hospitals, and other health care facilities) Yes _____ No _____

Medical condition associated with increased risk of progressing to TB disease if infected [e.g., diabetes mellitus, silicosis, head, neck, or lung cancer, hematologic or reticuloendothelial disease such as Hodgkin's disease or leukemia, end stage renal disease, intestinal bypass or gastrectomy, chronic malabsorption syndrome, low body weight (i.e., 10% or more below ideal for the given population)] Yes _____ No _____

**The significance of the travel exposure should be discussed with a health care provider and evaluated.*

1. **Does the student have signs or symptoms of active tuberculosis disease?** Yes _____ No _____
   If No, proceed to 2 or 3. If Yes, proceed with additional evaluation to exclude active tuberculosis disease including tuberculin skin testing, chest x-ray, and sputum evaluation as indicated.
2. **Tuberculin Skin Test (TST)**
   (TST result should be recorded as actual millimeters (mm) of induration , transverse diameter; if no induration, write "0". The TST interpretation should be based on mm of induration as well as risk factors.)**

   Date Given: ___/___/_____ (M D Y) Date Read: ___/___/_____ (M D Y)
   Result: _____ mm of induration **Interpretation: positive _____ negative _____

   Date Given: ___/___/_____ (M D Y) Date Read: ___/___/_____ (M D Y)
   Result: _____ mm of induration **Interpretation: positive _____ negative _____
3. **Interferon Gamma Release Assay (IGRA)**

   Date Obtained: ___/___/_____ (M D Y) (specify method) QFT-G QFT-GIT T-Spot other _____
   Result: negative _____ positive _____ indeterminate _____ borderline _____ (T-Spot only)

   Date Obtained: ___/___/_____ (M D Y) (specify method) QFT-G QFT-GIT T-Spot other _____
   Result: negative _____ positive _____ indeterminate _____ borderline _____ (T-Spot only)
4. **Chest x-ray: (Required if TST or IGRA is positive)**
   Date of chest x-ray: ___/___/_____ (M D Y) Result: normal _____ abnormal _____

**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 past TB disease
- Organ transplant recipients
- Immunosuppressed persons: taking > 15 mg/d of prednisone for > 1 month; taking a TNF-α antagonist
- Persons with HIV/AIDS

**The significance of the travel exposure should be discussed with a health care provider and evaluated.*

>10 mm is positive:

- Persons born in a high prevalence country or who resided in one for a significant* amount of time
- History of illicit drug use
- Mycobacteriology laboratory personnel
- History of resident, worker or volunteer in high-risk congregate settings
- Persons with the following clinical conditions: silicosis, diabetes mellitus, chronic renal failure, leukemias and lymphomas, head, neck or lung cancer, low body weight (>10% below ideal), gastrectomy or intestinal bypass, chronic malabsorption syndromes

>15 mm is positive:

- Persons with no known risk factors for TB disease

HEALTH CARE PROVIDER

Name _____ Signature _____

Address _____ Phone (_____)_____