

***REQUIRED AND RECOMMENDED VACCINES
INSTRUCTIONS FOR UNIVERSITY STUDENTS***

TABLE OF CONTENTS

REQUIRED VACCINES	1
Measles, Mumps, Rubella (MMR)	1
Hepatitis B	1
Meningococcal Quadrivalent (A, C, W, Y).....	1
Tetanus, Diptheria, Pertussis	2
Polio.....	2
Tuberculosis Screening/Testing	3
RECOMMENDED VACCINES	3
Hepatitis A.....	3
Varicella.....	3
Serogroup B Meningococcal	3
Human Papillomavirus (HPV).....	4

REQUIRED VACCINES/ TB SCREENING

The following instructions are adapted from the American College Health Association Guidelines. 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/index.html>. ACHA Guidelines for Tuberculosis Screening and Targeted Testing of College and University Students are available at www.acha.org/guidelines.

Measles, Mumps, Rubella (MMR)

VACCINATION SCHEDULE: Two doses of MMR at least 28 days apart after 12 months of age.

MAJOR INDICATIONS:

- All college students born after 1956 without laboratory evidence of disease.
- Those born before 1957 without other evidence of immunity should receive one dose; two doses if in an outbreak.

CONTRAINDICATIONS AND PRECAUTIONS: 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.

Hepatitis B

- Hepatitis B-alum (single antigen – Engerix B, Recombinax HB)
- HepB-CpG (Heplisav-B)

VACCINATION SCHEDULE:

- Single Antigen Hep B—series of 3 doses (given at 0, 1 and 6 mo. intervals) for adults 18 and over; adolescents ages 11-15 years may receive 2 adult doses of Recombivax HB (given at 0 and 4-6 mo. interval)*
- HepB-CpG—series of 2 doses (given at 0, 1 mo.); age 18 or older who are unvaccinated or incompletely vaccinated; must have minimum of 4 weeks interval and both doses HepB-CpG

INTERCHANGEABILITY AND DOSING SCHEDULE:

Series consisting of a combination of 1 dose of HepB-CpG and a single antigen HepB):

- Adhere to the 3-dose schedule, minimum of 4 weeks between dose 1 & 2; 8 weeks between dose 2 & 3; and 16 weeks between dose 1 & 3.
- If HepB-CpG is substituted for dose 2 of single antigen HepB, it is recommended that the HepB-CpG is the third dose (given a minimum of 4 weeks from the previous dose to complete the 3-dose series).

MAJOR INDICATIONS: All college students. In particular, students enrolled in health care professional programs should receive Hepatitis B vaccination.

CONTRAINDICATIONS AND PRECAUTIONS: Individuals with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any hepatitis B vaccine or to any component of Heplisav-B, including yeast.

**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*

Meningococcal Quadrivalent (A, C, W, Y)

- Conjugate
- Note: Polysaccharide vaccine is no longer available.

VACCINATION SCHEDULE:

- 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 \geq 16 yrs, no booster dose required

Persons with persistent complement component deficiencies 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.

Students 21 years of age and younger 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. 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.

MAJOR INDICATIONS:

Adolescents 11-18 years of age and other populations at increased risk, including college students living in residence halls/similar housing, etc., persons with persistent 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.

CONTRAINDICATIONS AND PRECAUTIONS:

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 tetavalent 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.

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.
- Td: 7 years and older, preparation of tetanus and diphtheria toxoids.
- Tdap: adolescent and older, preparation of tetanus, diphtheria toxoids, and acellular pertussis.

VACCINATION SCHEDULE:

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 Td boosters at 10 year intervals, beginning 10 years after receiving Tdap.

- One dose of Tdap required on or after 10th birthday.
- If last Tdap is more than 10 years old, must have a tetanus booster (Td or Tdap) within the last 10 years (after 9/1/2011 for fall or 1/1/2012 for spring).

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

CONTRAINDICATIONS AND PRECAUTIONS:

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 tetavalent 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.

Polio

- Inactivated (IPV)
- Oral poliovirus (OPV no longer available in U.S.)

VACCINATION SCHEDULE: Primary series in childhood with IPV alone, OPV alone, or IPV/OPV sequentially; IPV booster only if needed for travel after age 18 years.

MAJOR INDICATIONS: IPV for certain international travelers to areas or countries where polio is epidemic or endemic.

CONTRAINDICATIONS AND PRECAUTIONS: History of hypersensitivity to any of the components of the vaccine.

Tuberculosis Screening/Testing: “Tuberculosis Screening” is required for all non-health sciences students. “Tuberculosis Testing” is also required for students who answer “yes” to any question on Tuberculosis Screening. **All screening/testing must be completed on or after 3/1/2021 (fall entry) or 7/1/2021 (spring entry).***

*** The CDC recommends postponing TST and IGRA testing until ≥ 4 weeks after completion of COVID vaccine series; students will be provided with a 30-day grace period after last vaccine to submit testing results (TST or IGRA). Testing completed too early may require repeat testing.**

RECOMMENDED VACCINES

The following vaccines are recommended for adults. College matriculation provides the opportunity to assure that students receive the appropriate vaccines.

Hepatitis A

VACCINATION SCHEDULE: Given as a series of 2 doses (given at 0, 6–12 mo.) for age 12 months or greater. *

MAJOR INDICATIONS: 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 non-injectable drugs, persons who have clotting-factor disorders, persons working in hepatitis A research laboratories and with hepatitis A infected nonhuman primates, persons with chronic liver disease, and close personal contacts with international adoptees within 60 days after arrival from highly endemic countries).

CONTRAINDICATIONS AND PRECAUTIONS: History of hypersensitivity to any of the components of the vaccine.

**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.*

Varicella

VACCINATION SCHEDULE: 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.

MAJOR INDICATIONS:

- 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).

CONTRAINDICATIONS AND PRECAUTIONS: 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.

Serogroup B Meningococcal

- MenB-4C (Bexsero[®], 2 dose series)
- MenB-FHbp (Trumenba[®], 2 or 3 dose series)

VACCINATION SCHEDULE:

- For MenB-4C: 0–2 months (Category A or B below)
- For MenB-FHbp: 0–2–6 months (Category A below), or 0–6 months (Category B below)

MAJOR INDICATIONS:

Category A: Should be administered to persons at increased risk due to:

- Outbreaks of serogroup B meningococcal disease
- Persistent complement component deficiencies
- Treatment with eculizumab for hemolytic uremic syndrome or paroxysmal nocturnal hemoglobinuria
- Anatomic or functional asplenia including sickle cell disease. Laboratory workers routinely exposed to isolates of *N. meningitidis* [*Category A: Recommendations made for all persons in age or risk-factor group.*]

Category B: May be administered to:

- Adolescents and young adults age 16–23 for short term protection (preferred age 16–18)
- Serogroup B vaccines may be administered with Men ACWY but at different anatomic site, if possible. [*Category B: Recommendations are made through consultation and discussion between the individual and their health care provider.*]

CONTRAINDICATIONS AND PRECAUTIONS:

- Defer in pregnant or lactating females unless at increased risk.
- History of hypersensitivity to any of the components of the vaccine.
- MenB-4 (Bexsero[®]): use with caution if hypersensitive to latex.
- The two vaccines are not interchangeable, so the same product must be used for all doses.

Human Papillomavirus (HPV)

- 9-valent (HPV9) [Bivalent (HPV2) and Quadrivalent (HPV4) are no longer available]

VACCINATION SCHEDULE:

Administer human papillomavirus (HPV) vaccine to **natal* females through age 26 years and natal* males through age 21 years** (males aged 22 through 26 years may be vaccinated based on individual desire for protection and clinical decision).

The number of doses of HPV vaccine to be administered depends on age at initial HPV vaccination:

- Aged 15 years and older with no previous dose of HPV vaccine: Administer 3 -dose series at 0, 1–2, and 6 months (minimum intervals: 4 weeks between doses 1 and 2, 12 weeks between doses 2 and 3, and 5 months between doses 1 and 3)
- Aged 15 years or older with at least one dose initiated at age 15 or older: complete the series for a total of 3 doses
- Aged 9–14 years at HPV vaccine series initiation and received 1 dose (or 2 doses less than 5 months apart): Administer additional 1 dose
- Aged 9–14 years at HPV vaccine series initiation and received 2 doses at least 5 months apart: No additional dose is needed
- Adults, age 27 through 45 years, based on shared clinical decision making. (Note: Although many adults ages 27–45 years have prior exposures to 1 or more HPV types, most have not been exposed to all 9 HPV types that are contained in the vaccine. Also, at any age, having a new sex partner is a risk factor for being exposed to a new HPV infection.)

Special Populations

Adults with **immunocompromising conditions (including HIV infection)** through age 26 years: Administer 3-dose series at 0, 1–2, and 6 months

Men who have sex with men **through age 26 years: Administer 2- or 3-dose series depending on age at initial vaccination (see above); if no history of HPV vaccine, administer 3-dose series at 0, 1–2, and 6 months.**

Historical Vaccine Schedule (The following vaccines are no longer available and have been replaced by the 9 - valent vaccine):

- Bivalent vaccine: natal females, 3 doses at 0, 1 and 6 months
- Quadrivalent vaccine: 11 to 26 years; natal males, 11 to 21 yrs., 3 doses at 0, 1, 6 months

MAJOR INDICATIONS:

- All 11- or 12-year-olds; may be started at age 9.
- If not vaccinated previously: natal women through age 26; natal males through age 21.

**natal=gender assigned at birth*

The HPV vaccines are indicated for prevention of cervical cancers in women and for use in both females and males for the prevention of pre-cancers and genital warts, anal cancer, and anal intraepithelial dysplasia caused by HPV types included in the vaccine. No HPV or Pap test screening is required prior to administering vaccine; routine cervical cancer screening should continue according to current recommendations.

CONTRAINDICATIONS AND PRECAUTIONS: 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.