

Central Michigan University
PRE-MATRICULATION IMMUNIZATION RECOMMENDATIONS

The following recommendations are provided to facilitate the implementation of a comprehensive prematriculation immunization policy at Central Michigan University. Vaccine-preventable diseases continue to occur on American campuses. In response to changing epidemiology and the introduction of new vaccines, the American College Health Association Vaccine Preventable Diseases Committee monitors age-appropriate public health recommendations and updates their guidelines accordingly. This document is drawn from those guidelines and is consistent with the Advisory Committee on Immunization Practices (ACIP) recommendations from the 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/nip/publications/ACIP-list.htm>.

Please share this information with your healthcare provider to assist in the process of reviewing and updating your immunizations. For additional information, contact our Immunization and Travel Health Clinic at (989) 774-6591 or e-mail healthservices@cmich.edu.

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 <i>All health sciences 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.</i>	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 18 years of age	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). <i>All health sciences 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 the vaccine.</i>	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.

Vaccination	Vaccination Schedule	Major Indications	Contraindications and Precautions
<p>Tetanus, Diphtheria, Pertussis</p> <ul style="list-style-type: none"> - 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 (<7 years of age) 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 	<p>Primary series with DT, DTaP, DTP, or Td</p> <p>Routine tetanus toxoid and reduced diphtheria toxoid, every 10 years, age 11-64 years. TdaP for next booster (single dose)</p> <p>For adolescents age 11-18, at least 5 years should have elapsed since the last dose of tetanus and diphtheria toxoid-containing vaccine, prior to receiving Tdap.</p> <p>For adults 19-64 years, Tdap to replace a single dose of Td for booster immunization against tetanus, diphtheria, and pertussis</p> <p>Tetanus prophylaxis in wound management: For both age groups above, patients who require a tetanus-toxoid containing vaccine as part of wound management should receive Tdap instead if they have not previously received Tdap. If Tdap is not available or was administered previously, Td should be administered.</p> <p>Pertussis prophylaxis: For both age groups above, intervals shorter than 10 years since the last Td may be used to protect against pertussis. Particularly in settings with increased risk from pertussis or its complications for those who have or who anticipate having close contact with an infant <12 months of age (parents, child care providers, healthcare providers), a single dose of Tdap should be administered. The benefits of using Tdap at a shorter interval to protect against pertussis generally outweighs the risk of local systemic reactions after vaccination. The safety of intervals as short as 2 years between Td and Tdap are supported by studies from Canada.</p> <p>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.</p>	<p>One dose of Tdap replacing on decennial Td booster for all college students</p> <p>Any student in the setting of pertussis outbreaks, close contact with infants less than 12 months of age, or wound management, as appropriate</p> <p><i>Health sciences students with patient contact should receive a single dose of Tdap at an interval as short as two years from the last Td.</i></p> <p><i>Health sciences students with no patient contact should receive a single dose of Tdap according to the routine recommendation and interval guidance for use of Tdap in adults.</i></p>	<p>History of hypersensitivity or serious adverse reaction to any of the components of the vaccine.</p> <p>There is a theoretical risk of increased rates of local or systemic reactions when two diphtheria 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.</p>

Vaccine	Vaccination Schedule	Major Indications	Contraindications and Precautions
Quadrivalent Human Papillomavirus Vaccine (HPV)	Females 11 or 12 years old. All females age 13-26 years old who have not received the vaccine (3 doses at 0,2, and 6 months)	All female college students 11 to 26 years old. No HPV or Pap test screening is required prior to administering the vaccine; however, routine cervical cancer screening should continue according to prior recommendations.	Pregnancy, history of hypersensitivity to yeast or to any vaccine component; moderate or severe acute illnesses (defer vaccine until improved); may be given to immunocompromised females, but vaccine responsiveness and efficacy may be reduced.
Influenza -Trivalent inactivated influenza vaccine (TIV) - Live attenuated influenza vaccine (LAIV; licensed for healthy <i>non-pregnant</i> persons age 5-49 years)	Annually	College students at high risk of complications from the flu, such as diabetics, asthmatics, or patients with certain immunodeficiencies; students with contact with a high-risk individual ; and any student who wants to minimize disruption of routine activities during epidemics	History of hypersensitivity to any of the components of the vaccine
Hepatitis A Vaccine	Given as a series of 2 doses (given at 0,6-12 months) for age 12 months or older.**	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 non-human 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. <i>All health sciences students.</i>	History of hypersensitivity to any of the components of the vaccine
Pneumococcal Polysaccharide Vaccine-23 valent	Childhood, adolescence, adulthood	Young adults with diabetes, heart disease, chronic pulmonary or liver disease. Revaccinate every 5 years for immunodeficiency states, renal failure, recipients of clotting factor concentrates, asplenia, terminal complement component deficiencies, and HIV infection	History of hypersensitivity to any of the components of the vaccine

Other recommendations:

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

Vaccine	Vaccination Schedule	Major Indications	Contraindications and Precautions
<p>Meningococcal Tetravalent (A,C, Y, W-135) Meningitis Vaccine</p> <p>- Conjugate (preferred)</p> <p>- Polysaccharide (acceptable alternative if conjugate not available)</p>	<p>11-55 years (data for revaccination pending)</p> <p>Over 2 years of age, repeat every 3-5 years if increased risk continues</p>	<p>Populations at increased risk, including freshmen living in dormitories/residence halls, persons with terminal complement deficiencies or asplenia, laboratory personnel with exposure to aerosolized meningococci, and travelers to endemic or hyperendemic areas of the world.</p> <p>Non-freshmen college students under 25 years of age may choose to be vaccinated to reduce their risk of meningococcal disease. ⁺</p>	<p>History of hypersensitivity or serious adverse reactions to any of the components of the vaccine</p> <p><i>Avoid vaccinating persons who are known to have experienced Guillain-Barre (GBS) syndrome.</i></p> <p>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).</p> <p>Efforts should be made to administer Tdap and tetravalent meningococcal conjugate (MCV4) vaccines simultaneously if both are indicated.</p> <p>If simultaneous vaccination is not feasible, Tdap and MCV4 vaccines (which contain diphtheria toxoid) can be administered in any sequence.</p>

Other recommendations:

⁺ Colleges may target all matriculating freshmen if targeting those in dormitories/residence halls is not feasible.

Immunizations 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 or the Central Michigan University Health Services Travel Clinic for specific information.

TUBERCULOSIS SCREENING FOR THOSE AT HIGH RISK OF HAVING HAD TB EXPOSURE

High risk students are advised to have a Mantoux PPD TB skin test done within 6 months of admission to CMU.

Categories of high risk students include those who have arrived within the past 5 years from countries where TB is endemic. It is easier to identify countries of low rather than high TB prevalence. Therefore, students should undergo TB screening if they have arrived from countries **EXCEPT:** Canada, Jamaica, Saint Kitts and Nevis, Saint Lucia, USA, Virgin Islands (USA), Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, Norway, San Marino, Sweden, Switzerland, United Kingdom, American Samoa, Australia, or New Zealand.

Other categories of high-risk, include those with HIV infection; who inject drugs; have resided in, volunteered in, or worked in high-risk congregate settings such as prisons, nursing homes, hospitals, residential facilities for patients with AIDS, or homeless shelters; and those who have clinical conditions such as diabetes, chronic renal failure, leukemias or lymphomas, low body weight, gastrectomy and jejunioileal by-pass, chronic malabsorption syndromes, prolonged corticosteroid therapy (e.g., prednisone 15 mg/d for 1 month) or other immunosuppressive disorders.