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I. PURPOSE:
For the protection of the health of our students and because of the risks of exposure to infectious diseases to which students are subjected in the course of clinical work, certain tests and immunizations are required. This manual outlines those tests and immunizations and other infection control practices for a student within the Sanford School of Medicine and USD School of Health Sciences programs of physician’s assistant studies, occupational therapy, physical therapy, dental hygiene, addiction studies, medical laboratory science, social work, and nursing. Because of the individual nature of each program and its clinical experiences, the specifics of this policy may vary slightly. This manual is reviewed and updated on an annual basis by an appointed ad hoc committee including the Sanford School of Medicine Chief of Infectious Diseases, and other representatives from both the Sanford School of Medicine and the USD School of Health Sciences.

Students are also responsible for being familiar with the policies and practices of the facility at which they are training.

II. General Student Safety Guidelines (Infection Control/Student Safety)

The scope of the term “Infection Control” is all encompassing and includes, but is not limited to prevention, treatment, infection control, microbiology, pharmacology and epidemiology. The purpose of this section of the student manual is to provide guidelines for the prevention of acquisition of an infectious disease by the student from the patient or environment and the prevention of transmission of an infectious disease from student to the patient (or patient to patient via the student). The safety techniques (i.e. HAND HYGIENE #1) presented here will serve to prevent both acquisition and transmission of infections and therefore are called STANDARD PRECAUTIONS.

Additional precautions may be necessary and are called TRANSMISSION-BASED PRECAUTIONS.

Students will be given instruction in precautionary and infection control measures for blood borne pathogens and communicable diseases prior to students’ first contact with patients and first contact with human tissue, blood products, and body fluids. Specific training will be given on hand hygiene, use of personal protective equipment, handling of sharps, and specific isolation precautions to ensure students are aware of how to prevent acquisition and transmission of infectious diseases. In addition, students will be instructed on what constitutes an exposure and the protocol to follow in the event of an exposure. Follow-up training will be provided on an annual basis.

However, no matter how careful one is and no matter how carefully one adheres to STANDARD PRECAUTIONS and TRANSMISSION-BASED PRECAUTIONS, accidents and exposures can happen – accidents/conditions that may expose you to an infectious agent. It is important for students to be aware of the process of reporting accidents in pursuit of treatment and/or prophylaxis where appropriate. In case of an accidental exposure to bloodborne pathogens or other infectious agents, following the SPECIFIC, organism-based guidelines may save your life!

In addition to policies from the programs regulating professional dress, the following policies are in place to prevent the acquisition and transmission of infections:
• **Fingernails:**
  Keep natural nail tips less than ¼ inch in length. Artificial nails, add-ons or extenders are not to be worn by staff or students who provide direct patient care.

• **Footwear:**
  Employees and students must wear shoes that are appropriate to their job role/function and area. Shoes must be clean and well-kept. Socks or hosiery must be worn by all individuals who have patient contact. For those employees and students that provide patient care or whose job or training involves potential contact with blood and body substances or that use patient care supplies and equipment, footwear must completely cover the entire top of the foot and have no holes.

**A. STANDARD PRECAUTIONS**

a. Must be used in the care of all patients, regardless of diagnosis.

b. Requires the use of appropriate barriers (Personal protective equipment – PPE, (gloves, eye protection, masks, gowns, face shields) as needed to prevent contact with blood, body fluids, secretions excretions and contaminated items. Gloves are single use and disposable.

c. Requires hand hygiene:

d. Handwashing (15 seconds with antimicrobial soap and warm water) or use of an appropriate antiseptic hand cleanser, before donning gloves, after glove removal and before and after patient contact.

e. Hand hygiene may be required between tasks or procedures on the same patient to prevent cross contamination of different body sites.

f. Other times hand hygiene is important: when coming on duty, after use of toilet facilities, after blowing or wiping nose or coughing, before and after eating, before going off duty. When hands are visibly soiled, wash with antimicrobial soap and water instead of hand antiseptic cleanser.

g. Disposable sharps with engineered safety features will be used at all times in compliance with OSHA Standards to reduce risk of occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps. These will have safety features that are activated after use and prior to disposal. Sharps must be disposed of in an appropriate sharps disposal puncture-proof container immediately after use. Needles will not be recapped, broken or disassembled before disposal.

h. Laboratory specimens from all patients are collected in designated containers and placed for transport in bags labeled with the biohazard symbol.

i. Special measures may be indicated for hospitalized patients in addition to the routine practices of Standard Precautions. When these types of precautions are discontinued, Standard Precautions will be maintained. Standard Precautions are used in ambulatory settings including those with a history of drug resistant organisms.
B. TRANSMISSION BASED PRECAUTIONS:

Don appropriate PPE prior to entering the room and doff PPE prior to exiting the room.

a. Airborne Precautions:
- To be used for patients known or suspected to have microorganisms transmitted by small airborne droplet nuclei (e.g. tuberculosis, measles, varicella).
- Requires a private room for the patient with negative air pressure to surrounding areas, and 6-12 air exchanges per hour.
- Requires respiratory protection (usually a disposable, particulate respirator) when entering the room if the patient is known or suspected to have tuberculosis or other airborne pathogens.
- Fit testing is required if N95 or greater mask is indicated.
- Susceptible individuals should not enter the room of patients known or suspected to have measles or varicella. If susceptible persons must enter the room they should wear respiratory protection.

b. Droplet Precautions:
- Used for patients known or suspected to have microorganisms transmitted by large particle aerosols generated by coughing, sneezing or talking (e.g. *Haemophilus influenza*, *Neisseria meningitidis*, Group A Streptococcus, pertussis, rubella, adenovirus, influenza, mumps, parvovirus).
- Private room for patient if possible. If a private room is not available, patients should be cohorted (grouped with similar disease), if possible, or require special separation of at least three feet between patients. Special air handling and ventilation are not required.
- Requires the uses of disposable masks when within three feet of the patient.

c. Contact Precautions:
- Used in caring for patients known or suspected to have epidemiologically important microorganisms that can be transmitted by direct contact with patient and/or contaminated environmental surfaces (e.g. MRSA, multidrug resistant bacteria, *Clostridium difficile* and other agents that cause diarrhea, respiratory syncytial virus (RSV) parainfluenza, herpes simplex varicella zoster, agents causing wound, skin or conjunctival infections, scabies and lice.
- A private room should be used, if possible. Cohorting or consultation with infection control personnel should be accomplished if a private room is not available.
- Requires the use of gloves when entering the room. Gloves should be changed after contact with infective material and removed after leaving the patient environment. Hand hygiene should be performed immediately after glove removal.
- Usually requires the use of gowns and masks if contact with patient or patient’s environment is anticipated. For patients with diarrhea, a private room with a
private bathroom is preferable. If possible, a private commode should be available at bedside.

III. OCCUPATIONAL EXPOSURE TO INFECTIOUS AND ENVIRONMENTAL HAZARDS
This section provides details related to student safety guidelines for prevention, prophylaxis and the interventions available to USD Health Affairs students who have the potential for exposure to blood, other body fluids, or other potentially infectious materials during the normal course of their student educational activities.

A. Definition:
An occupational exposure incident shall be defined as eye, mouth, other mucous membrane, non-intact skin or parenteral contact with blood or other potentially infectious materials that result from the performance of a health professions’ student duty or assignment.

B. Exposure Incidents Requiring Follow-up:
Exposure incidents requiring follow-up include, but are not limited to: a percutaneous injury with contaminated sharp/instrument, or exposures to eye, mouth, other mucous membrane, or non-intact skin with blood, body fluids or tissue, semen, vaginal secretions, cerebrospinal, synovial, pleural, peritoneal, pericardial, or amniotic fluid; respiratory resuscitation without a resuscitation device; bites resulting in blood exposure to either person involved.

1. Protocol:
a. Decontamination: Follow good first aid techniques including thorough flushing of mucous membranes and eyes, wound care if appropriate and thorough handwashing. There is no benefit from expressing blood at the site of the injury or application of caustic agents such as bleach.
b. Notification and Immediate Medical Treatment: It is the student’s responsibility to report all suspected exposure incidents and seek medical treatment:
   1. Immediately report to Faculty Member/Supervisor.
   2. Immediately report to Employee Health/Infection Control Personnel in the clinical site where the exposure occurred. If the clinical site does not provide post-exposure evaluation for students you need to seek treatment at the nearest ER.
   3. Next report to the Campus Dean for SSOM and Site Coordinator for all other program departments.
   4. After initial management, return report form to the appropriate contact person within your program department as soon as possible.
c. Documentation: The student is required to report the following essential information to Employee Health/Infection Control Personnel and complete the University of South Dakota Health Affairs Occupational Exposure Report Form.
   1. Procedure being performed, including where and how the exposure occurred.
   2. Type of exposure: puncture, scratch, bite, mucous membrane of the eye, nose, or mouth, or other.
3. Extent of exposure: type and amount of blood/body fluid/material, severity of exposure including depth and whether fluid was injected, etc.
4. PPE (personal protective equipment) worn at the time of exposure: gloves, gown, mask, protective eyewear, face shield, etc.
5. If related to a sharp device, description of the sharp including the brand name.
6. Decontamination: handwashing, flushing mucous membrane of eye, nose, mouth, etc.
7. First aid administered
8. Student’s hepatitis B immunity status, last tetanus booster, etc.
9. Source patient: known or unknown.
10. Is it possible the patient was exposed to your blood?

d. University of South Dakota Health Affairs Occupational Exposure Form: This form may be downloaded from the portal. **Do not delay seeking post-exposure evaluation and treatment for the purpose of retrieving the report form.** However, it is the student’s responsibility to complete the student section of the form (first page). Students are responsible for seeing that the medical professional doing the evaluation completes and signs the second page of the form and/or brings a copy of the post-exposure evaluation and follow-up written opinion from the facility where this occurred. The student is required to bring the form to the contact person for his/her program as soon as possible. Note this form is in addition to any forms required by the facility where the incident occurred.

e. Questions/Concerns: Contact your supervising faculty and program/course director as indicated. Medical students have access to the Sanford Medical Center 24/7 Exposure Hotline, regardless of clinical site where the exposure occurred: call 605-366-5251 during office hours or call 605-333-1000 and ask operator to connect you to the Infection Control Nurse. All other students should contact their Site Coordinator.

f. Billing for Testing: Responsibility for payment of immediate wound care, post-exposure testing or initial post-exposure prophylaxis (if recommended by the medical professional providing the consultation and based on current CDC guidelines) differs by program; check with your program for details. USD SSOM pays for initial post-exposure testing and follow-up testing for medical students involved in required clinical activities. Students assume the costs for any exposures that occur during volunteer/non-required activities.

C. Other Occupational Exposures
The primary routes of infectious disease transmission in US healthcare settings are contact, droplet, and airborne. Students may protect themselves by having their immunizations up to date and through the adherence to standard precautions and transmission-based precautions as applicable. However, no matter how careful one adheres to standard precautions and transmission based precautions, accidents and exposures can happen. Students are responsible for following the organism specific (i.e. tuberculosis, measles, mumps, pertussis, etc.) guidelines and follow-up as outlined on pages 4 and 5 of this Manual.
D. Policy:

Students will be given instruction in precautionary and infection control measures for blood borne pathogens and other communicable diseases prior to students’ first contact with patients and first contact with human tissue, blood products, and body fluids. Specific training will be given on hand hygiene, use of personal protective equipment, handling of sharps, and specific isolation precautions to ensure students are aware of how to prevent acquisition and transmission of infectious diseases. In addition, students will be instructed on what constitutes an exposure and the protocol to follow in the event of an exposure. Follow-up training will be provided on an annual basis.

The facility providing the student’s post-exposure management will be responsible for contacting the student with the results of the testing and the post-exposure evaluation and written opinion from the medical provider within 15 days of the completion of the initial evaluation or as soon as it is available. Students are responsible for completing and returning the Occupational Exposure to Infectious and Environmental Hazards form to the program chairs/education coordinators within 15 days of exposure.

(See Appendix for the Occupational Exposure Report Form).

Responsibility for payment of immediate wound care, post-exposure testing or initial post-exposure prophylaxis (if recommended by the medical professional providing the consultation and based on current CDC guidelines) differs by program; check with your program for details. USD SSOM pays for initial post-exposure testing and follow-up testing for medical students involved in required clinical activities. Students assume the costs for any exposures that occur during volunteer/non-required activities.

E. Educational Accommodations:

- The USD Division of Health Affairs fulfills its obligation to educate future healthcare personnel while adhering to procedures that maintain the health and safety of patients and that protect the personal rights of students with infectious diseases or immunocompromised conditions. Students who are infected with potentially communicable agents (e.g. hepatitis B, hepatitis C, or HIV) and/or are immunocompromised are expected to discuss this with their personal physician and if the physician believes that a modification of the usual clinical activities of the student is required as a result of infection with a communicable agent, the student is responsible for sharing the documentation with the Dean of Student Affairs and/or Department Chair/Dean who then shares with the appropriate faculty involved in the student’s clinical activities.

- The Dean of Student Affairs and/or when appropriate, discipline-specific Chairs or Deans will work together to modify the clinical activities of immunocompromised students for whom patients may pose unwarranted risks or infected students who may pose unwarranted risks to patients.
• All reasonable accommodations will be made to assist the student in achieving the requirements of the educational program. The Dean for Student Affairs/Department Chair/Dean may convene a faculty panel to assist in the process.

• A student, when provided reasonable accommodations, must be able to perform the routine duties and minimum requirements for each course/clinical assignment, and meet the technical standards for enrollment at their specific program.

• Likewise, accommodations will be made for students in quarantine to monitor for signs and symptoms of communicable illnesses such as mumps, measles, varicella, etc.

• Decisions regarding return to educational activities will be made on an individual basis, and depend on the input from Infection Prevention at the clinical site, Student Affairs and the student’s personal healthcare provider.

IV. SPECIFIC STUDENT SAFETY GUIDELINES
(General information, Prevention, Prophylaxis/Treatment)

This section of your manual briefly summarizes the specific exposures you might have, the prevention strategies that must be followed and the treatment/prophylaxis available. In care of accidental needle sticks or injury with other contaminated sharp object (scalpel) or exposure to an infectious agent where treatment or prophylaxis is available, it may be a specific hospital Infection Control Program or Emergency Room or Clinic nurse that will walk you through the reporting and treatment/prophylaxis process for that institution. Use this information to be your own advocate in ensuring your proper follow-up.

ANY exposure to patient blood and body fluids – percutaneous, splash into eyes, mucous membranes or onto already injured skin – may carry with it organisms that can kill and/or severely compromise your life (i.e. HIV). There are NO exposures minor enough to ignore; all exposures must be reported – for your safety.

A. HEPATITIS B VIRUS (HBV)
Prevention/Prophylaxis/Treatment/Follow-up:
ALL students are required to receive HBV vaccination (3 doses at 0, 1 and 6 months). The first two doses of the three dose series are required prior to the start of classes. A positive HEP B titer without proof of vaccine dates is accepted if unable to obtain immunization dates.

AND
Hepatitis B Titer
• Test for anti-HBs or HbsAB (HBV surface antibodies). Recommended 1-2 months after completion of the vaccination series.
• Students admitted with documented prior vaccination history must also provide immune status documentation. If that is not available, current immune status will be determined by the titer.
• A copy of the titer report must accompany immunization form or be provided as soon as it is available.
• Those who do not seroconvert when the titer is done 1-2 months following the series should be revaccinated with a full series with the titer repeated 1-2 months after the last immunization.
• Those who do not seroconvert when the titer has been delayed greater than 12 months since the initial series may choose to obtain one additional booster dose of the vaccine with the titer repeated 1-2 months after the last immunization. If the second titer remains below 10mIU/mL, the person will complete the series followed by another titer.
• If after two complete series, titers remain below 10mIU/mL, the person is considered at risk for acquiring HBV. Students should be counseled about the occupational risk and the need to obtain HBIG prophylaxis for any known or probable parenteral exposure to HBsAg-positive blood. No further vaccine series are recommended. However, the student should be tested for HBsAg to make sure that chronic HBV infection is not the reason for vaccine non-response (assuming the 2nd negative HbsAb titer was performed 1-2 months following the last hepatitis B vaccine of the second series).

Additional information:
• CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Post exposure Management: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6210a1.htm
• CDC Epidemiology and Prevention of Vaccine-Preventable Diseases; Pink Book (2015): http://www.cdc.gov/vaccines/pubs/pinkbook/hepb.html

B. HEPATITIS C VIRUS (HCV)
Prevention/Prophylaxis/Treatment/Follow-up:

C. HUMAN IMMUNODEFICIENCY VIRUS (HIV):
Prevention/Prophylaxis/Treatment/Follow-up:

The decision to take anti-retroviral drugs may be difficult. Free consultation is available through the PEPline (The National Clinician’s Post-Exposure Prophylaxis Hotline): http://nccc.ucsf.edu/clinician-consultation/pep-post-exposure-prophylaxis/

Follow the procedure as outlined in the Occupational Exposure to Infectious and Environmental Hazards protocol.
1. Exposure decontamination: Good first aid
2. Documentation and Follow-up
3. Notification
4. Completing Report Forms

D. TUBERCULOSIS:
Prevention/Prophylaxis/Treatment/Follow-up:
TB Skin Tests or Interferon Gamma Release Assay (IGRA)
• Initial Two-Step TB Skin Test: Documentation of a two TB skin test is required. If the first is negative, a second TB skin test will be given in 1-3 weeks. The second negative will confirm lack of infection (any two documented TB skin tests completed within a 12 month period can meet this requirement.)

OR
• Interferon Gamma Release Assay (IGRA)
• History of BCG vaccine is NOT a contraindication for tuberculin testing. TB skin test reactivity caused by BCG vaccine generally wanes with time. If more than 5 years have elapsed since administration of BCG vaccine, a positive reaction is most likely a result of *M. tuberculosis* infection.

Students with a positive TB skin test or IGRA: Are required to provide documentation from their health care provider including the following:
1. Result of the positive TB skin test (date placed, read, measurement in mm, signed by a health care provider) or IGRA report.
2. Chest x-ray report.
3. Determination by the health care provider if this a latent TB infection or active TB disease.
4. Treatment; including what it was, when started, when completed, etc.

Students who have active TB disease will be restricted from school and patient contact until they have provided documentation that satisfies the infection prevention policies of the health care facilities where the student trains.

Students with a known history of a positive TB skin test/latent disease will complete a symptom checklist annually (see Appendix for form).

Additional information: https://www.cdc.gov/tb/default.htm

E. **MENINGOCOCCAL DISEASE:**
**Prevention/Prophylaxis/Treatment/Follow-up:**
This is a recommended vaccine for any students in a health related program at USD. Please refer to the CDC’s Epidemiology and Prevention of Vaccine-Preventable Diseases; The Pink Book 13th Ed (2015): [http://www.cdc.gov/vaccines/pubs/pinkbook/mening.html](http://www.cdc.gov/vaccines/pubs/pinkbook/mening.html)
All 11 to 12 year olds should be vaccinated with a meningococcal conjugate vaccine (Menactra* or Menveo*). A booster dose is recommended at age 16 years. Teens and young adults also may be vaccinated with a serogroup B meningococcal vaccine. In certain situations, other children and adults could be recommended to get any of the three kinds of meningococcal vaccines. Students should consult with their physician about the appropriate vaccine for their specific risk.

F. **INFLUENZA:**
All Health Affairs students are required to have the flu vaccine by December 1st annually.
[http://www.cdc.gov/flu/healthcareworkers.htm](http://www.cdc.gov/flu/healthcareworkers.htm)
VARICELLA ZOSTER VIRUS (VZV) (Chicken Pox/Shingles):

**Prevention/Prophylaxis/Treatment/Follow-up:**

One of the following is required:

1. Varicella Titer if the student has had the chicken pox that indicates immunity (copy of titer report must accompany immunization form);

**OR**

2. Two doses of varicella immunization is indicated if there is no history of the disease or if the varicella titer is negative. Recommended interval is 4-8 weeks between doses.


G. **MEASLES (RUBEOLA), MUMPS, RUBELLA:**

**Prevention/Prophylaxis/Treatment/Follow-up:**

One of the following is required:

1. All students born after December 31, 1956 are required to have medically signed proof of TWO properly administered immunizations.

**OR**

2. Immune titers for measles (rubeola), mumps, and rubella.


H. **PERTUSSIS:**

**Prevention/Prophylaxis/Treatment/Follow-up:**

One time dose of Tdap (tetanus, diphtheria, adult pertussis) is required. Tdap vaccine can be administered to healthcare workers without concern for the length of time since the most recent Td vaccine. If it has been longer than 10 years since the Tdap, a Td or Tdap booster is required.

*Additional information:* [http://www.cdc.gov/vaccines/pubs/pinkbook/pert.html](http://www.cdc.gov/vaccines/pubs/pinkbook/pert.html)
III. ENTERING AND VISITING STUDENT IMMUNIZATION POLICY

For the protection of the health of our students and because of the risks of exposure to infectious diseases to which students are subjected in the course of clinical work, certain tests and immunizations are required. Entering and visiting students are required to provide documentation of all required immunizations to the program prior to matriculation or visit. As these immunizations are part of the School(s) on-going affiliation agreements with our clinical sites. Students will not be allowed to register or participate in any clinical activities until documentation is provided.

Health Affairs Requirements:

- Students are required to follow the Immunization Compliance Policy of their specific program.
- For students in programs requiring full compliance with the USD Health Affairs Immunization Policy, the immunization form must be completed with the appropriate signatures. Include copies of titer reports and other medical records when applicable.

1. Measles (Rubeola), Mumps, Rubella. **One** of the following is required:
   - All students born after December 31, 1956 are required to have medically signed proof of TWO properly administered immunizations.
   **OR**
   - Immune titers for measles (rubeola), mumps, and rubella.

2. Hepatitis B immunization. **ALL** students are required to receive HBV vaccination (3 doses at 0, 1 and 6 months). The first two doses of the three dose series are required **prior** to the start of classes. A positive HEP B titer without proof of vaccine dates is accepted if unable to obtain immunization dates.

   **AND**

   **Hepatitis B titer.**
   - Test for anti-HBs or HbsAB (HBV surface antibodies). Recommended 1-2 months after completion of the vaccination series.
   - Students admitted with documented prior vaccination history must also provide immune status documentation. If that is not available, current immune status will be determined by the titer.
   - A copy of the titer report must accompany immunization form or be provided as soon as it is available.
   - Those who do not seroconvert when the titer is done 1-2 months following the series should be revaccinated with a full series with the titer repeated 1-2 months after the last immunization.
   - Those who do not seroconvert when the titer has been delayed greater than 12 months since the initial series may choose to obtain one additional booster dose of the vaccine with the titer repeated 1-2 months after the last immunization. If the second titer remains below 10mIU/mL, the person will complete the series followed by another titer.
   - If after a second series, titers remain below 10mIU/mL, the person is considered at risk for acquiring HBV.
3. **Varicella/Chicken Pox immunity.** One of the following is required.
   - Varicella Titer if the student has had the chicken pox that indicates immunity (copy of titer report must accompany immunization form);
   - **OR**
   - Two doses of varicella immunization is indicated if there is no history of the disease or if the varicella titer is negative. Recommended interval is 4-8 weeks between doses.

4. **Tdap (tetanus, diphtheria, adult pertussis).** One life time time dose of Tdap (tetanus, diphtheria, adult pertussis) is required. Tdap vaccine can be administered to healthcare workers without concern for the length of time since the most recent Td vaccine. If it has been longer than 10 years since the Tdap, a Td or Tdap booster is required.

5. **Upon admission: TB Skin Tests or Interferon Gamma Release Assay (IGRA)**
   - **Initial Two-Step TB Skin Test:** Documentation of two TB skin tests is required. If the first is negative, a second TB skin test will be given in 1-3 weeks. The second negative will confirm lack of infection (any two documented TB skin tests completed within a 12 month period can meet this requirement.)
   - **OR**
   - **Interferon Gamma Release Assay (IGRA)**
   - History of BCG vaccine is NOT a contraindication for tuberculin testing. TB skin test reactivity caused by BCG vaccine generally wanes with time. If more than 5 years have elapsed since administration of BCG vaccine, a positive reaction is most likely a result of *M. tuberculosis* infection.

**During enrollment:**
6. **Annual TB Skin Test:**
   - Students are required to have an annual TB Skin Test
   - **OR**
   - IGRA
   - **OR**
   - Annual symptom checklist if history of latent TB.

If there is a lapse greater than 13 months between annual TB skin tests, the two-step TB skin test will be repeated.

Students with a positive TB skin test or IGRA:
Are required to provide documentation from their health care provider including the following:
   - Result of the positive TB skin test (date placed, read, measurement in mm, signed by a health care provider) or IGRA report.
   - Chest x-ray report.
   - Determination by the health care provider if this a latent TB infection or active TB disease.
   - Treatment; including what it was, when started, when completed, etc.
Students who have active TB disease will be restricted from school and patient contact until they have provided documentation that satisfies the infection prevention policies of the health care facilities where the student trains.

Students with a known history of a positive TB skin test/latent disease will complete a symptom checklist annually (see Appendix for form).

7. **Annual Influenza vaccination:**
The influenza vaccine is required by December 1st annually.

**Recommended Immunizations:**
- **Meningococcal (meningitis) vaccine.** Recommended for students living in college dormitories who have not been immunized previously or for college students under 25 years of age who wish to reduce their risk.
- All 11 to 12 year olds should be vaccinated with a meningococcal conjugate vaccine (Menactra® or Menveo®). A booster dose is recommended at age 16 years. Teens and young adults also may be vaccinated with a serogroup B meningococcal vaccine. In certain situations, other children and adults could be recommended to get any of the three kinds of meningococcal vaccines. Students should consult with their physician about the appropriate vaccine for their specific risk.
- **Childhood DTP/DTaP/DPT and polio vaccines.**
SPECIAL CONSIDERATIONS:

1. STUDENTS WITH SKIN INFECTIONS, DIARRHEA OR CONTAGIOUS DISEASES SHOULD CONSULT THEIR PHYSICIAN AND THE HOSPITAL/CLINIC INFECTION CONTROL PROGRAMS PRIOR TO PATIENT CONTACT.

2. HIV, HBV, HCV-INFECTED Student
   There are two concerns: safety of patients and safety of the student. CDC has recommended that HIV, HBV, HCV positive health care workers:
   - Use standard precautions – prevention of transmission of HIV, HBV, HCV from student to patient; prevention of transmission of infections to the student who may be immune compromised.
   - Currently available data provide no basis for recommendations to restrict the practice of HCW’s infected with HIV, HBV, HCV who perform invasive procedures not identified as exposure-prone.
   - Exposure-prone procedures will be identified by an expert review panel composed of representation from USD Sanford Health Affairs and institutions at which the procedures are performed. The CDC recommendations from July 2012 will serve as a guide for identifying exposure prone procedures: https://www.cdc.gov/mmwr/PDF/rr/rr6103.pdf
   - Health care workers/students who perform exposure-prone procedures should know their HIV, HBsAg and antibody status. If HBsAg is positive, students should know their HBeAg status and may be counseled to obtain their HBV DNA status.
   - Students infected with HIV, HBV, or HCV will be excluded from “exposure-prone” procedures unless they have sought counsel from an expert review panel and been advised under what circumstances, if any, they may perform these procedures.
   - The facilities where students who are HIV, HBV, or HCV infected are training need to be notified.
   - Mandatory testing of students for HIV or HBsAg (or HBeAg) is not recommended.
   These recommendations are controversial. “Providers have an ethical and professional obligation to know their HBV status and to act on such knowledge accordingly (CDC Public Health Ethics Committee, personal communication, 2001).”

3. The Pregnant Student
   Pregnancy does not preclude a health affairs student from any activities related to health care responsibilities. Prior to pregnancy, the student should ensure all immunizations are up to date and know serologic status for measles, mumps, rubella, varicella, and hepatitis B. During pregnancy, the student should receive influenza vaccine at the right time, maintain routine tuberculosis screening, adhere to proper infection control practices (Standard Precautions) and have prompt evaluation and treatment of any illness.

4. Health Insurance
   All students enrolled in a health affairs program are required to have major medical health insurance.
5. **Required Vaccine Declination**

Declination of any of the required immunizations for medical or religious reasons will be considered on a case by case basis. The student must provide documentation from their health care provider to their Program Chair/Dean of Student Affairs that he/she was counseled regarding the efficacy, safety, method of administration, and benefits of vaccination, the risks of acquiring any of these serious diseases without vaccination, as well as potential life-threatening consequences to the patients they come in contact with. Since affiliation agreements between the University of South Dakota and the various health care systems students rotate through specifically state students will be immunized (as specified in the Immunization Policy), consultation will also be required with Employee Health of those facilities to determine if students are able to train at that site.
Student _______________________________ Course & Campus _______________________________

Student’s phone number _______________________________

Program: Addiction Studies ☐; Dental Hygiene ☐; Health Science ☐; Medical Laboratory Science ☐; Medicine ☐; Nursing ☐; Physical Therapy ☐; Physician Assistant ☐; Occupational Therapy ☐; Social Work ☐; Master of Social Work ☐; Master of Public Health ☐

Date of report _______ Date of exposure _______ Time of exposure _______

Hospital/Clinic site where exposure occurred _______________________________

City _______________________________ Supervisor/Faculty _______________________________

Details of Exposure: To be Completed by the Student

Details of the occurrence/procedure being performed; including where and how the exposure occurred _______________________________

Type of exposure: puncture- ☐; scratch- ☐; bite- ☐; nonintact skin- ☐; mucous membrane of: eye- ☐; nose- ☐; mouth- ☐; other type of exposure (describe) _______________________________

Extent of exposure (type and amount of blood/body fluid/material, severity of exposure including depth and whether fluid was injected, etc.) _______________________________

PPE (personal protective equipment) worn: gloves ☐; gown ☐; mask ☐; protective eyewear ☐; face shield ☐; other PPE (describe): _______________________________

If related to a sharp device: needle type: suture ☐; injection ☐; IV needle ☐; scalpel ☐; instrument ☐; brand name of device: _______________________________

other sharp device (describe): _______________________________

Decontamination (i.e. hand washing, flushing mucous membrane eye, nose, mouth, etc.) _______________________________

Description of first aid administered _______________________________

Is it possible the patient was exposed to your blood? YES ☐ NO ☐ (circle one)

Who was the exposure incident reported to at the facility? _______________________________

Date Reported: _______________ Contact information _______________________________

I consent to the release of information such as immunization and immunity status and serology test results both to and from the clinical site providing my post-exposure counseling and management.

Student's signature: _______________________________ Date: _______________________________
Post Exposure Management

Student’s Information

Student name ___________________________________________ Date of exposure _________________________

Medical person completing post exposure management ______________________________________________________

Date of last tetanus booster: ____________________________

Hepatitis B immunity status:
Series completed: yes [ ] no [ ]
Post immunization titer (HBsAb): positive [ ] negative [ ] unknown [ ]

Hepatitis B vaccination:
Series completed: yes [ ] no [ ]
Post immunization titer (HBsAb): positive [ ] negative [ ] unknown [ ]

Post exposure testing of student completed:
   HIV [ ] yes [ ] no [ ] student drawn but declined HIV testing; blood will be stored for 90 days from incident [ ]
   HCV Ab [ ] yes [ ] no [ ]
   HBsAb [ ] yes [ ] no [ ] not tested (known immunity) [ ]

Hepatitis B status:
Series completed: yes [ ] no [ ]
Post immunization titer (HBsAb): positive [ ] negative [ ] unknown [ ]

Post exposure testing of student completed:
   HIV [ ] yes [ ] no [ ] student drawn but declined HIV testing; blood will be stored for 90 days from incident [ ]
   HCV Ab [ ] yes [ ] no [ ]
   HBsAb [ ] yes [ ] no [ ] not tested (known immunity) [ ]

Source Patient's Information

Was the source patient identifiable? Yes [ ] No [ ]

Source patient was tested for:
   HIV (30 min) date drawn ________ not tested [ ] written copy of results given to patient [ ] date received ________
   HCV Ab date drawn ________ not tested [ ] written copy of results given to patient [ ] date received ________
   HBsAg date drawn ________ not tested [ ] written copy of results given to patient [ ] date received ________

Other tests performed:
   HIV Prophylaxis offered to the student; date started ____________________ HBIG indicated; date given ____________

Post Exposure Health Evaluation and Written Opinion

The above named student has reported an occupational exposure incident to blood or other potentially infectious material
   to: Facility name _____________________________
   Address ___________________________________________ Phone # _____________________________

   Student was informed of the results of the post exposure evaluation, ________

   Counseling was provided regarding the mode & risk of transmission of blood borne pathogens relative to the exposure
   incident. Follow up evaluation & treatment indications, including prophylaxis, for the student were discussed. ________

   Student has been informed of any health conditions resulting from exposure to blood or other potentially infectious
   materials which require further evaluation or treatment. ________

   HIV & Hepatitis C Ab recommended at baseline [ ] Follow up lab work is recommended on ____________
   Hepatitis B vaccination: [ ] indicated [ ] is not indicated [ ] Other lab work (specify) is recommended on ____________

   Follow-up health appointment is recommended on ____________

   Precautions to prevent transmission of a blood borne illness were recommended to the student during the follow-up period. ________

   The importance of maintaining confidentiality of the source patient’s identity and test results was discussed with the student ________

   Date of Health Evaluation ________________ [ ] Copy of written opinion given to student; date ________________
   (provide within 15 days of completing health evaluation)

   Name/title of Medical Provider _____________________________
   Signature ______________________________________________
   Printed name ____________________________________________

Please return a copy of the exposure report, post exposure management, evaluation and written opinion to the Education
   Coordinator in your program
Name          DOB          USD ID#


Health Affairs Requirements: For students in programs requiring full compliance with the USD Health Affairs Immunization Policy, this form must be completed with the appropriate signatures. Include copies of titer reports and other medical records when applicable.

REQUIRED IMMUNIZATIONS:

A. MMR (Measles, Mumps, Rubella) Vaccine.  Two doses required for all students born after 12/31/56.
   Dates:  1.____/____/_____  2._____/_____/_____
   OR  individual vaccine/proof of immunity as noted below.
   1. Measles (Rubeola)
      Vaccine Dates:  1.____/____/_____  2._____/_____/_____
      OR
      Has report of positive immune titer.  Date:_____/_____/____ ATTACH LAB REPORT
   2. Rubella (German Measles)
      Vaccine Dates:  1.____/____/_____  2._____/_____/_____
      OR
      Has report of positive immune titer.  Date:_____/_____/____ ATTACH LAB REPORT
   3. Mumps
      Vaccine Dates:  1.____/____/_____  2._____/_____/_____
      OR
      Has report of positive immune titer.  Date:_____/_____/____ ATTACH LAB REPORT

B. Date of Tdap (tetanus, diphtheria, adult pertussis):  Date:_____/_____/____
   If longer than 10 years; date of latest booster  Date:_____/_____/____ Td or Tdap (circle one)

C. Varicella (Chicken Pox) One of the following is required:
   Documentation of positive varicella titer.  Date:_____/_____/____ ATTACH LAB REPORT
   OR
   Vaccine: Two doses are required for those without evidence of immunity. Recommended interval is 4-8 weeks between doses.
   Dates:  1.____/____/_____  2._____/_____/____

D. Hepatitis B Vaccine - Three doses and positive titer required. (If unable to obtain dates of immunizations a positive titer is acceptable)
   1st dose  Date:_____/_____/____
   2nd dose  Date:_____/_____/____(1 month after 1st dose)
   3rd dose  Date:_____/_____/____(6 months after 1st dose)
   AND
   Hepatitis B Titer (HbsAB or Anti-HBs – hepatitis B surface antibodies)
   Immunity demonstrated by hepatitis B titer - ATTACH LAB REPORT
   Date:_____/_____/____  Positive/Reactive_____  Negative/Nonreactive_____  (if neg. see immunization policy)

Updated 12/20/2016
E. **Tuberculosis Skin Test** - PPD (Mantoux) – Two-step TB skin test required initially or Interferon Gamma Release Assay

Two-Step TB Skin Test; recommended 1-3 weeks apart.*Note any two documented TB skin tests completed within a 12 month period shall be considered a two-step.

Step 1 (Date placed)___/___/____ Step 1 (Date read)___/___/____ Results:___________mm

Step 2 (Date placed)___/___/____ Step 2 (Date read)___/___/____ Results:___________mm

If two-step was completed more than 12 months prior to start of classes, an annual TB skin test is required

Date placed _____/___/____ Date read _____/___/____ Results:___________mm

Date placed _____/___/____ Date read _____/___/____ Results:___________mm

Interferon Gamma Release Assay (IGRA): Date:_____/___/_____ Positive_______ Negative_______

ATTACH LAB REPORT

**History of Positive TB Skin Test:**

Date placed _____/___/____ Date read _____/___/____ Results:___________mm

ATTACH COPY OF CHEST X-RAY REPORT AND DOCUMENTATION FROM HEALTHCARE PROVIDER.

See immunization policy.

History of BCG vaccination: Date_____/______/______(TB skin test required regardless of prior BCG vaccination)

F. **Influenza vaccine.** Required by Dec. 1st annually Date:_____/___/_____ Not required prior to admission if starting in the summer or fall

**RECOMMENDED IMMUNIZATIONS:**

G. **Meningococcal Vaccine (Meningitis vaccine).** Refer to immunization policy. Students should consult with their physician about their specific risk:

Vaccine:___________________Date:_____/___/_____ Vaccine:___________________Date:_____/___/_____  

H. **Childhood DTP/TDaP/DPT immunizations:**

Dates of Primary Series: 1.____/____/____ 2.____/____/____ 3.____/____/____

4.____/____/____  5.____/____/____

I. **Polio immunizations:**

Dates of Primary Series: 1.____/____/____ 2.____/____/____ 3.____/____/____

4.____/____/____  5.____/____/____ Type of vaccine: Oral (OPV)_____ Inactivated (IPV)_____  

**SIGNATURE** X_________________________ Date_____/___/_____  
Must be signed by Healthcare Provider (Physician, PA, NP, Nurse)

**PRINT NAME** _______________________________  
Hospital/Clinic Address of physician or nurse verifying this information: Hospital/Clinic Phone #________________________

A copy of titer/lab reports must be provided with this form as indicated above.  
Updated 12/20/2016
University of South Dakota Health Affairs  
ANNUAL SYMPTOM CHECKLIST FOR TUBERCULOSIS

This form is to be used annually when a student has had a positive result occur from Tuberculosis screening using either skin testing (PPD) or blood sample (QFT-G).

Student’s Name:____________________________ Date:________________

In the last year have you experienced any of the following symptoms for more than three weeks at a time?

<table>
<thead>
<tr>
<th>SIGN &amp; SYMPTOM REVIEW:</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistent cough</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excessive sweating at night</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unexplained weight loss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coughing up blood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excessive fatigue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persistent fever</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TB skin test: Date___________ Reading (mm)________________________

Quantiferon: Date___________ Results______________________________

Date of last chest x-ray___________

Chest x-ray results__________________________________________

Prophylactic treatment received? If yes; drug, dosage, and duration of treatment.

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Student’s Signature __________________________ Date__________________

Nurse’s Signature __________________________ Date__________________