Volunteer State Community College
Medical Laboratory Technology Program
Safety Manual

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TABLE OF CONTENTS

Blood Borne Pathogens Exposure Control Plan

1.0 Purpose

IT IS THE PURPOSE AND GOAL OF VOLUNTEER STATE COMMUNITY COLLEGE TO ADEQUATELY PROTECT ALL EMPLOYEES FROM THE RISK OF TRANSMISSION OF COMMUNICABLE DISEASES IN THE WORKPLACE.

The purpose of this document is to inform students and to reduce blood borne pathogen (such as HBV and HIV) exposure incidents.

This policy establishes a program and procedures for controlling exposure to blood borne pathogens, including evaluation and follow-up of biohazard injuries according to currently recommended guidelines by the Occupational Safety and Health Administration and the Centers for Disease Control and Prevention. The OSHA Standard on Blood borne Pathogens is published in the Federal Register. The OSHA's Compliance Assistance Guideline on enforcement procedures has become VSCC's guideline.

It is the intent of the Medical Laboratory Technology Program staff and students to conform to the requirements of the exposure plan for Volunteer State Community College and to those affiliated agencies and clinical sites, as well as the requirements of local, state, and federal laws and to guidelines from the Centers for Disease Control and Prevention concerning blood borne pathogens.

2.0 Definitions/Abbreviations

2.1 Definition of a biohazard injury:

A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's or a student's duties.

2.2 Definition of other potentially infectious materials (OPIM):

- The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, pleural fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, and body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.
- Any unfixed tissues or organs (other than intact skin) from a human (living or dead; and

- HIV containing cell or tissue cultures, organ cultures, and HIV and HBC containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

2.3 Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ALT	Alanine Aminotransferase
Anti-HBs	Antibody to Hepatitis B Surface Antigen
Anti-HCV	Antibody to Hepatitis C Virus
AST	Aspartate Aminotransferase
CLS	Clinical Laboratory Science
HB	Hepatitis B Infection
HBeAg	Hepatitis B e Antigen
HBIG	Hepatitis B Immune Globulin
HBsAb	Hepatitis B Surface Antibody
HBsAg	Hepatitis B Surface Antigen
HBC	Hepatitis B Virus
HCV	Hepatitis C Virus
HCW	Health Care Worker
HIV	Human Immunodeficiency Virus
IDV	Indinavir
ISG	Immune Serum Globulin
OSHA	Occupational Safety and Health Administration
Td	Tetanus and Diphtheria Toxoid (for adult use)
TIG	Tetanus Immune Globulin
ZDT or AZT	Zidovudine
3TC	Lamivudine

2.4 Other Definitions

- All employees or students who are directly exposed or whose jobs have the likelihood of exposure to blood or other potentially infectious materials incur risk of infection and subsequent illness are referred to as "high risk".
- Blood borne infections are infections that can be transmitted when a biohazardous injury exposes an individual to blood or high risk body fluids that contain an infectious agent. Blood borne infections of concern include Hepatitis B, Hepatitis C, Delta Hepatitis and Human Immunodeficiency virus.
- Delta Hepatitis is hepatitis caused by a defective virus that may cause infection only in the presence of active Hepatitis B infection.
- Hepatitis B is a viral infection of the liver. It can progress to cirrhosis and liver cancer. 6-10% of acutely infected adults become carriers.
- Hepatitis C is a parenterally (includes intravenous, subcutaneous, intramuscular, or intramedullary – usually injection) transmitted virus. It has traditionally been considered a transfusion associated disease.
- Hepatitis E is acquired when water or food contaminated with human feces is ingested. It is among the leading causes of acute viral hepatitis in young to middle-aged adults in developing countries. It has a high mortality rate (nearly 20%) in infected pregnant women. It is not considered to be blood borne, but instead waterborne.
- HIV is the human immunodeficiency virus that is the causative agent of Acquired Immunodeficiency Syndrome.
- Occupational exposure means reasonably anticipated skin, eye, mucous membrane, or parenteral (includes intravenous, subcutaneous, intramuscular, or intramedullary – usually injection) contact with blood or other potentially infectious materials that may result from the performance of a student or employee's duties.
- Sharps are any objects that can penetrate the skin, including, but not limited to, needles, scalpels, broken glass, shattered plastic, and broken capillary tubes.
- Source patient is the person who is the source of the blood which was exposed to another person.
- Universal precautions (UP) are precautions to use in infection control. According to the concept of UP all human blood and certain human body fluids are treated as if the specimens could be infectious for HIV, HBV, and other blood borne pathogens.

3.0 Exposure Determination

OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or potentially infectious materials. The exposure determination is made without regard to the use of personal protective

equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment). This exposure determination is required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. VSCC has identified the following positions as having the likelihood of occupational exposure (high-risk personnel):

School nurse

Security officers

Coaches, assistant coaches, and trainers/managers

Instructor in Physical Education

Instructors in Allied Health

Maintenance/custodial personnel

All students enrolled in Allied Health courses which have the potential for occupational exposure. All VSCC staff involved in lab instruction or lab preparation work has the potential for occupational exposure.

In addition, OSHA requires a listing of job classifications in which some employees may have occupational exposure. Since not all the employees in these categories would be expected to incur exposure to blood or other potentially infectious materials, tasks, or procedures that would cause these employees to have occupational exposure are also required to be listed in order to clearly understand which employees in the categories are considered to have occupational exposure. The job classification tasks for this category are as follows:

Administrative support personnel

3.1 Tasks and Procedures with potential for occupational exposure include:

- Use of lancets and needles by students or faculty in obtaining blood samples. Use of lancets or needles by employees in laboratories in the department.
- Procedures involving handling tubes of blood, piglets of blood or other containers with blood and/or blood products in the above listed courses.
- Cleaning up of a blood or body fluid spill
- Disposal of regulated waste

4.0 Methods of Compliance

Compliance with VSCC Exposure Control Plan (ECP):

4.1 The VSCC Safety office will make itself available as a resource to assist employees in the interpretation of this policy.

4.2 The Safety Director as VSCC is Michelle Brown (Maintenance Dept.).

4.3 The Medical Laboratory Technician program will prepare and submit a Program Exposure control plan to the VSCC safety office.

4.4 The VSCC Safety Office will consolidate the program ECPs into a VSCC ECP.

4.5 The Program will make available the Hepatitis B vaccination series to all employees but not students having occupational exposure.

4.6 The Program will provide post-exposure evaluation and follow up for all its employees, but not students, who have had an exposure incident during the course of their employment. Students can go to Sumner Regional Hospital Corporate Health Dept. and have titers drawn for Hep B and HIV. They can also go to any walk-in clinic or the Health Department for HIV titers. Clinical sites may have additional policies and procedures for students to follow as well as provide post-exposure evaluations.

4.7 The Program shall provide training required in this policy. The safety office will make itself available as a resource to the program in planning and conducting the required training.

Faculty, staff, and students in Allied Health Programs will receive an orientation to Blood borne Pathogen Exposure through the program instructors and/or directors at the affiliating clinical instruction prior to commencing clinical experience.

4.8 VSCC must keep records of all training offered as well as medical records associated with the ECP.

5.0 General Compliance

- Universal Precautions

  Universal precautions as defined by OSHA shall be observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, **all body fluids shall be considered potentially infectious materials.**

- Engineering Controls

  Engineering controls shall be used to eliminate or minimize VSCC employee and student exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used. Engineering controls shall conform to the following guidelines:

Engineering controls shall be examined and maintained or replace on a regular schedule to optimize their effectiveness.

The following engineering and workplace controls will be utilized: eye wash, shower, sharps containers and biohazard waste containers.

The program shall provide hand washing facilities which are readily accessible to VSCC employees and students.

When provisions of hand washing facilities are not feasible, the program shall provide an appropriate antiseptic hand cleanser. When antiseptic hand cleansers are used, the employee or student will be instructed to wash hands with soap and water as soon as feasible thereafter.

VSCC employees and students of the program shall be instructed on the safety rules and regulations attached including to use good hand washing tech and to wash hands as soon as possible:

After each patient contact, including a phlebotomy

After removing gloves or other personal protective equipment

After distributing specimens

When visibly contaminated with blood, body fluids, or tissue

Before leaving the clinical work area

Periodically during the day when handling and testing body fluids

- Work Area Restrictions

VSCC employees and students will also be instructed on the safety rules and regulations concerning work area restrictions. These restrictions include: no drinking, smoking, applying cosmetics or lip balm, handling contact lenses, gum, or putting anything in one's mouth while in the laboratories where there is a reasonable likelihood of occupational exposure. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, counter or bench tops, or other areas designated as work area by the facility and where blood or other potentially infectious materials are present or may be present.

- Needles

Contaminated needles and other contaminated sharps will not be bent, recapped, removed, sheared, or purposely broken. OSHA allows an exception to this if the procedure would require that contaminated needle be recapped or

removed and no alternative is feasible and the action is required by the medical procedure. If such action is required, the recapping or removal of the needle must be done by the use of a mechanical device or a one-handed technique.

- Specimens

  Specimens of blood or other potentially infectious materials will be placed in a container which prevents leakage during the collection, handling, processing, storage, and transport of specimens.

  Any specimen which could puncture a primary container will be placed in a container which is puncture resistant. No specimens will be accepted in any form that may puncture a primary container.

  If outside contamination of the primary container occurs, the primary container shall be placed within a secondary container which prevents leakage during the handling, processing, storage, transport, or shipping of the specimen.

- Contaminated Equipment

  Equipment which has become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible.

- Personal Protective Equipment

  Personal Protective Equipment (PPE) will be available to VSCC employees and students in the clinical setting and in the student laboratories. PPE includes, but is not limited to, gloves, face shields or masks and eye protection, and lab coats. Students may need to purchase their fluid resistant lab coats. Gloves and shields will be provided. Hypoallergenic gloves, powderless gloves or other alternatives will be found for those students and staff allergic to gloves normally provided.

  Laboratory coats will be worn in the laboratory when it is reasonably anticipated that employees will have contact with blood or blood products in the laboratory, or if the instructor requires the laboratory coats be worn throughout the day in the laboratory. Generally, in summer practicum and clinical rotations, the student will wear a laboratory coat while in the laboratory. All laboratory coats which are penetrated by blood shall be removed immediately or as soon as possible. All personal protective equipment will be removed prior to leaving the work area.

Fluid resistant laboratory coats will be laundered at the laundry service of the clinical laboratory site. Students and employees should not take laboratory coats home to be laundered. Soiled disposable lab coats will be discarded in a biohazardous waste container.

Gloves will be worn in the laboratory when it is reasonably anticipated that students will have hand contact with blood or other potentially infectious materials. Generally, in the clinical rotations, the student will wear the laboratory coat while in the laboratory. Gloves are not to be washed or reused and are to be discarded when done with them. Gloves should be replaced when they are torn, punctured, wet or when their ability to function as a barrier is compromised.

Facial barrier protection should be used if there is a significant potential for splattering of infectious agents into the eyes, nose, or mouth. This type of exposure may occur during the procedures that commonly result in the generation of droplets, splashing of body fluids, or the generation of tissue or bone chips. To be sure that all mucous membranes are protected, masks should never be worn without protective eyewear, or vice versa.

6.0 Housekeeping

The students should clean and decontaminate their lab space at the end of each session in which they have used blood or body fluid specimens.

All contaminated work spaces will be decontaminated as soon as feasible after a spill of blood or body fluid with a 10% bleach solution or properly diluted phenolic (vesphene) or other disinfectant specifically designated by the facility.

Any broken glassware which may be contaminated, should be decontaminated with a 10% bleach solution or a properly diluted phenolic (vesphene). The broken glassware should be picked up with a dustpan and broom and disposed of in a sharps container, or a broken glass container.

- Regulated Waste Disposal

  All contaminated sharps shall be discarded immediately into sharps containers. Other biohazard waste shall be put in appropriate containers which are in the lab. Containers of biohazard waste will be autoclaved and then disposed of in the regular trash.

7.0 Hepatitis B Vaccine

It is required that all students and staff in the MLT program have at least started their Hepatitis B vaccination series before working the blood and/or body fluids or sign a waiver as to their refusal to receive the vaccine.

8.0 Training

Training for all VSCC students and employees will be conducted prior to initial assignment to tasks where occupational exposure may occur. Training will be conducted during the laboratory Safety and Techniques lectures given and the beginning of each semester.

Training for the students will include information on the following:

- A general explanation of the epidemiology and symptoms of HBV and HIV.
- An explanation of the modes of transmission of HBV and HIV.
- MLT Program safety rules and regulations (an accessible copy will be made available to each student).
- Engineering and workplace controls
- Personal protective equipment available at this facility
- Hepatitis B vaccine
- Post exposure evaluation and follow-up
- Signs, labels, tags, and/or color-coding used to denote BIOHAZARD.

An opportunity for interactive questions and answers with person(s) conducting the training.

9.0 Recordkeeping

All records of incident reports will be maintained in the VSCC employee's or student's personnel file.

Appendix A

HIV additional information:

HIV, in its most severe form, destroys the body's ability to resist a wide variety of infections. Most of these secondary infections pose little or no risk to persons with normal immune systems. You can develop AIDS from 2 to 10 years or more after being infected with HIV. In some cases, the virus can be present in the body for 10 or more years before any symptoms occur. You do not have to have AIDS, show any symptoms, or even be ill to infect another person with HIV. Presently, there is no vaccine or cure for AIDS.

WHAT ARE THE SYMPTOMS OF HIV/AIDS?

Early symptoms include:

Swollen glands	Diarrhea
Chronic fatigue	Yeast infections
Fever	Night sweats

Loss of appetite and weight

The AIDS patient may suffer from one of many different diseases due to the immune system's inability to fight off infections. These diseases include forms of cancer and pneumonia. Casual contact with persons in high-risk groups for AIDS does not place you at risk for acquiring AIDS. No cases of AIDS have been identified among non-sexual household contacts of patients with AIDS. Although HIV is mainly transmitted through sexual contact and sharing needles, any situation in which blood is present in the work environment is an area of concern. If the infectious blood enters directly into the other person's body, there is the possibility of transference.

Hepatitis B (HBV) additional information:

Hepatitis B is a disease/inflammation of the liver due to the Hepatitis B virus. Symptoms appear gradually if at all. Many people who are infected have no symptoms and you cannot tell a person is infected by the way he/she looks or feels. Only having a blood test can identify often-infected persons. While most patients recover, HBV can be a very serious and sometimes fatal disease for which there are no specific treatments and no known cure. At the time of exposure to blood or body fluid of a known Hepatitis B carrier, Hepatitis B immune globulin may be administered which may reduce the likelihood of infection.

WHAT ARE THE SYMPTOMS OF HEPATITIS B?

Symptoms include:

Flu-like symptoms in the early stages	Vomiting
Weakness or fatigue	Lack of appetite
Jaundice	Abdominal pain
Diarrhea	

Those who have the disease build up antibodies for protection against further occurrences.

Hepatitis B Vaccination

Hepatitis B vaccines currently being used are produced by recombinant DNA technology using common bakers' yeast. The recommended series of three intramuscular doses administered only in the deltoid muscle of adults induce the production of a protective antibody in above 90% of healthy adults. Hepatitis B vaccines have been shown to be safe when administered to adults. It confers protection against Chronic Hepatitis B infection and the HBV carrier state. For adults who immune status is normal, booster doses of vaccine are not recommended, nor are serological testing to assess antibody levels necessary. Any presumed risk of adverse events associated with Hepatitis B vaccination must be balanced against the expected risk of acute and chronic liver disease due to the Hepatitis B virus.

Taking the vaccine is not mandatory, but highly recommended for health care workers.

If you do not want the vaccine, you must complete the form entitled: **Waiver Form for Hepatitis B Immunization** and return the form to Occupational Health and Safety.

Appendix B

Tuberculosis (TB)

Tuberculosis is a chronic, recurrent infection most common in the lungs, but any organ may be affected. Once infection is established (a positive TB skin test), clinical TB may develop within months, or it may be delayed for years or even decades.

TB refers to the disease caused by *Mycobacterium tuberculos, M. boris*, or *M. africanum*. Although other mycobacteria cause disease that mimic TB, the infections are not communicable and most respond poorly to drugs that are very effective for TB.

Infection is virtually always airborne. It occurs almost exclusively by inhalation of organisms dispersed as droplet nuclei from a person with positive pulmonary TB. The organisms may float in room air for several hours, increasing the chance of infecting an unsuspecting contact. Ten to fifteen million people are infected in the United State. More than 25,000 active TB cases were reported in 1990.

Signs and symptoms of active TB are:

Prolonged cough (over 2 weeks)	Fatigue
Cough with sputum or blood	Fever
Loss of appetite	Weight loss

Treatment:

Multiple antibiotics for 6-9 months

Treatment must be completed to be effective!!! Drug resistant TB results from active TB being repeatedly not treated with the full cycle of antibiotic therapy.

Transmission:

Inhalation of droplets of *Mycobacterium tuberculosis*

Increasing factors:

Poor ventilation

Prolonged shared air

Volunteer State Community College Plan/Protocol for Tuberculosis:

Gallatin Health Department has determined Sumner County to be in the Minimal-Risk category. This is based on the number of TB cases in our county area. Therefore, VSCC will abide by the Minimal-risk requirements.

Any employee requesting a TB (PPD) skin test will be given one without charge. The TB test is available at Sumner Regional Medical Center for students.

Any employee whose symptoms warrant testing will be offered the TB skin test or referred to their private physician.

Any employee with a reading of positive TB skin test 48-72 hours after being given the PPD skin test will:

1. Be sent to the Sumner County Health Department for evaluation and treatment.
2. If any employee is diagnosed with active TB, all employees that have been exposed in the work area will be given a PPD skin test initially.
3. If the reading after 48 hours are negative, the procedure will be repeated after 3 months.
4. If the two reading are negative, no further action will be needed.
5. If any positive reading should occur on any employee in the area, all employees in that area will repeat the skin test both initially and after 3 months.

EMPLOYEES OR STUDENTS WILL NOT BE ADMITTED TO CAMPUS UNTIL THEY HAVE BEEN RELEASED BY THE HEALTH DEPARTMENT.

Biohazard Exposure Control Plan

See document #1 for the Blood Borne pathogen exposure control Plan which includes definitions, etc.

1.0 Types of Exposure

When a student has an eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood, body fluids, excretions, secretions, mucous membranes, or contaminated equipment.

1.1 Blood or body fluid exposure is direct contact with blood or body fluids through the percutaneous route as seen in a laceration (scratch), through a splash of blood or body fluid onto a mucous membrane (i.e. mouth, nose, conjunctival/eye), or onto non-intact skin. Non-intact skin may be the results of a puncture wound received at the time of exposure (i.e. needle stick, broken glass), or may be from a previous opening in the skin such as a wound, a hangnail, acne, etc.

1.2 You CANNOT get HIV from the following:

- Shared food, drinking glasses, or towels
- Sinks or toilets in the bathroom
- Shared personal protective equipment such as goggles, respirators, or clothing
- Shared tools
- Insects such as mosquitoes have not been proven to carry the HIV virus
- There is no documented evidence that dried blood on a surface is strong enough to transmit HIV, but **Hepatitis B can be transmitted from dried blood.**

1.3 HIV and HBV can only be transmitted if both of the following are true:

- Exposed blood is infectious
- Blood is allowed to enter directly into the body

2.0 The following procedures describe the action that should be taken in the event that blood and body fluid exposure has occurred.

2.1 Step 1 - Immediate Action

2.1.1 For life threatening injuries, call 911 and/or Campus Police.

2.1.2 Exposure through a new wound

If the exposure is through a puncture wound, laceration (scratch) or other broken skin, immediately squeeze the site to try to induce bleeding, and then cleanse the would thoroughly with soap and water. The wound may be further cleansed with 10% providone-iodine solution (betadine) or alcohol.

2.1.3 Exposure through a previous wound

If the exposure is to a previous wound, immediately squeeze the site to try to induce bleeding (bleeding may not be possible), and then cleanse the wound thoroughly with soap and water. Further cleanse with 10% providone-iodine solution (betadine) or alcohol.

2.1.4 Exposure through a mucous membrane or conjunctival (eye) exposure

If the exposure is to a mucous membrane or conjunctival (eye) exposure, immediately irrigate the affected area for 15 minutes with copious amounts of water or normal saline. Be aware of the nearest eyewash.

2.1.5 Identify the source of the exposure and document it as explained below.

2.2 Step Two – Documentation

2.2.1 Clinical Site Students

Needlestick injury - the Student Exposure Incident Report form must be completed and sent to Michelle Boyd, Manager of the Environmental, Health & Safety department.

All other injuries - The injured student's instructor must complete the Student Accident Report. If the injury occurs outside of the classroom, Campus Police will assess injuries and advise the student on further reporting requirements.

2.2.2 VSCC Campus Student Accident/Illness

Needlestick injury - the Student Exposure Incident Report form must be completed and sent to Michelle Boyd, Manager of the Environmental, Health & Safety department.

All other injuries - The injured student's instructor must complete the Student Accident Report. If the injury occurs outside of the classroom, Campus Police will assess injuries and advise the student on further reporting requirements.

Completed injury reports must be returned via email or through secure interoffice mail to Wood Campus Building, office 106J.

2.2.3 Employee On-the-Job or Work-Related Injuries

The injured employee's supervisor must complete the Supervisor Incident-Injury Report and instruct the employee to initiate a workers' comp. claim by calling Corvel's 24/7 nurse triage line. Instructions for calling can be found on the attached Call Center and Location ID card as well as on page 2 of the attached Supervisor Incident-Injury Report.

Please note: When calling you must provide this exact location information: STATE TN – VOLUNTEER STATE COMMUNITY COLLEGE. All work-related injuries, even minor injuries, must be called in to Corvel.

The Supervisor Injury Report, and the phone call to the nurse triage line, must be completed within 24 hours of the injury. Failing to meet the 24-hour deadline could result in a penalty to the college.

Completed injury reports must be returned via email or through secure interoffice mail to Wood Campus Building, office 106J.

3.0 Step Three – Medical Evaluation

If needed, the student should meet with the Medical Director/designated clinical site contact person, emergency department (if after hours) or the student's own physician as to evaluation and recommendation follow up procedures as soon as possible.

4.0 Step Four - Follow Up

Following exposure, the student is responsible for obtaining follow up care from their personal physician as recommended during their evaluation.

Laboratory Safety Rules and Regulations

Sound fundamental laboratory techniques, well supervised and conscientiously carried out, can do much to achieve environmental control and reduce the hazards of infection.

1. Proper attire:
    a. Wear a fluid resistant coat while in the laboratory. DO NOT take lab coats home to launder them. Lab coats will be laundered by VSCC, if not disposable. The lab coats should be taken off once the student leaves the lab.
    b. Wrinkle-free, Vol State monogramed scrub top and scrub pants
    c. Appropriate, work or nursing shoes should be worn. Enclosed, leather, athletic shoes are allowed only if clean and tear-free. (Absolutely NO clogs, strapped, backless, or open toed shoes are allowed.) Socks are required.
    d. A solid white crew neck undershirt is permitted under scrub tops.
    e. Long hair must be secured back regardless of length. Beards and mustaches are acceptable if neatly trimmed.
    f. ABSOLUTELY no gum, candy, mints or food chewing/eating when in the laboratory.
    g. Fingernails should be clean and cut. Artificial nails are not allowed.
    h. Confine long hair while in the laboratory. Do not wear long earrings in the lab.
    i. Students will be sent home if they do not comply with the dress code.

2. Never perform direct mouth pipetting in the laboratory. Use safety bulbs.
3. Handle all blood and body fluid specimens with disposable gloves. Use masks and safety glasses or shields when the possibility of a splash may occur.
4. Dispose of hypodermic and vacutainer needles and lancets in special "sharps" containers (specially designed biohazard containers, usually colored red or yellow and made of polypropylene, for disposal of needles, lancets, and blades) designated for that purpose.
5. Dispose of blood or body fluid contaminated disposable equipment in special biohazard labeled containers designed for that purpose.
    a. If a blood or body fluid exposure occurs, (for example – needle exposure or splash on face) take off gloves, wash exposed area with

disinfectant soap immediately. Report to the instructor for further follow up.

b. If blood or body fluid contaminates your gloves, remove gloves and wash hands.
c. If blood is spilled or glass is broken in the lab, notify an instructor. The lab instructor will clean up the blood spill or broken glass. An instructor will wear gloves and disinfect the blood spill with a 10% dilution of bleach (commercial bleach is a 50% sodium hypochlorite solutions – we make a 10% dilution of that) solution for 5 minutes. Paper towels will then be used to absorb the spill and the contaminated paper towels will then be disposed of in a biohazard container for contaminated materials. Broken glass should be swept up and placed in a paper towel that is clearly labeled broken glass and placed in the broken glass receptacle. If the broken glass has blood or body fluid contamination it should be placed in <u>biohazard labeled glass disposal containers.</u>

6. Reusable glassware contaminated with blood should be immediately placed in a receptacle containing a 5% dilution of bleach solution or a phenolic compound.
7. Before centrifuging tubes, inspect the tube for cracks. Centrifuge tubes with stoppers on. Avoid filling a tube to the point where the rim becomes wet with potentially contaminated specimen.
8. Never leave a discarded tube or infected material unattended or unlabeled. Clean up the lab work area before leaving the lab. Supplies should be brought back to the supply counter. Contaminated reusable glassware should be placed in proper containers (see #6).
9. Disinfect the lab work area with a spray disinfectant and wash hands with a disinfectant soap before leaving lab. Use good hand washing techniques: later well, rinse hands under a stream of water for a minute and use a disposable paper towel to run off faucet.
10. Do not eat, drink, or smoke in the laboratory. Food and beverages are never to be stored in any laboratory refrigerator (or freezer) designed for laboratory supplies and specimens. These restrictions include: no drinking, smoking, applying cosmetics or lip balm, handling contact lenses, gum or putting anything in one's mouth while in the labs where there is a reasonable likelihood of occupational exposure.
11. To reduce the possibility of self-inoculation, develop the habit of keeping your hands away from you mouth, nose, eyes, and any other mucous membranes.
12. Acid dilutions should not be made up in the student laboratory. Remember if you do make up an acid solution elsewhere to add acid to water. If a

concentrated acid is transported to the laboratory a safety bucket should be sued. Safety buckets contain material to absorb a spill and/or protect a bottle from being broken on transit.

13. If hazardous chemical material is used in the laboratory the student will be informed as to the hazard involved and proper precautions to use.
    a. All chemical containers must be properly labeled with their exact contents. The label should also include the specific hazard(s) of the chemical. When a chemical is transferred from its original container to another, the new container must be labeled, if it is to be left unattended during the day or at the end of a shift.
    b. All chemicals should be labeled according to the specific hazards of the chemical. VSCC is using the NFP 4 diamond system.
14. Do not use Bunsen burners or other flame ignition devises in the laboratory.
15. Learn the location and how to operate the nearest eyewash fountain, safety shower, fire extinguisher and fire alarm box. If the fire alarm goes off, walk, DO NOT RUN, to the nearest exit. The closes exit map is located by the laboratory doors.
16. If you get any chemical on your skin or in your eye, immediately wash the area with an abundant quantity of water. For an exposure to the eye, wash with the eye wash fountain for 15 minutes. For a large spill, use the safety shower. Any spill should be reported to the instructor.
17. All accidents, injuries, or fires must be reported at once to the laboratory instructor.
18. Procedures in which noxious or poisonous gases are used or produced MUST always be carried out under the hood. Directions for these procedures will always be given to you by the instructor.
19. Never smell a reagent directly. Waft the vapors toward your nose by waving your hands. DO NOT taste any reagents.
20. Do not work alone. The laboratory instructor must be present when a procedure is being carried out.
21. Maintain your working area in a reasonable degree of neatness.
22. ALWAYS wash hands before leaving the laboratory at the end of the laboratory session!

<u>Professionalism Policies in the Lab</u>

1. When working with hospital patients or student samples, keep patient lab result information confidential. Do not photocopy or take a picture of patient lab results or patient identifying information.

2. Utilize your interpersonal relationship skills when working in the student laboratory. Equipment and supplies will have to be shared in the lab. Be willing to share your equipment and wait patiently for your turn. Be receptive to suggestions from instructors. Ask questions if you do not understand something. We, the instructors, are here to help you become a working technologist.