BLOODBORNE INFECTIOUS

Revisions

March 2022 revisions:

- Changed the term “employee(s)” to “worker(s)” where it applies to include students.
  - Students are not covered by HR’s policy for exposure procedures
- Added the definition of “worker”
- Changed policy to ensure a two handed method to cap needles is not used under any circumstances
- Corrected minor grammatical errors
- Added additional detail on what type of gloves would be considered personal protective equipment for bloodborne infectious diseases
- Added alternative text to appendix A pictures and replaced picture of appendix D with words for accessibility
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Introduction

The purpose of this control plan is to limit or eliminate exposure to bloodborne infectious diseases by having written procedures that follow the MIOSHA Bloodborne Infectious Diseases Standard (R 325.70001-325.700016). Compliance with the Bloodborne Infectious Diseases Standard will reduce the risk of exposure to blood and other potentially infectious materials (OPIM) that may pose a risk of Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and other bloodborne diseases. The University's Bloodborne Infectious Disease Exposure Control Plan is located on the Environmental Health and Safety (EHS) website at the link below:

Click here to enter EHS website

All University employees who hold positions determined to have occupational exposure are entitled to the protection afforded by the standard. Departments and units identified as having workers with occupational exposure to bloodborne pathogens and OPIM include but are not necessarily limited to:

- Athletics Department
- Biology Department
- Chemistry Department
- Public Safety Department
- School of Dentistry
- Wellness Center

from the workplace for example, sharps disposal containers, self-sheathing needles, or safer medical devices, such as sharps with engineered sharps injury protections and needleless systems.

Exposure Incident: A specific eye, mouth, other mucous membrane, non-intact skin (includes skin with dermatitis, hangnails, cuts, abrasions, chafing, acne, etc.), or parenteral contact with blood or other potentially infectious materials that results from the performance of a worker's duties.

Handwashing Facilities: Facilities that provide an adequate supply of running, potable water, soap, and single-use towels or an air-drying machine.

Source Individual: Any individual, living or dead, whose blood or other potentially infectious material may be a source of occupational exposure to a worker.

Standard Operating Procedures (SOPs): Any of the following that address the performance of work activities to reduce the risk of exposure to blood and other potentially infectious material:

- Written policies
- Written procedures
- Written directives
- Written standards of practice
- Written protocols
- Written systems of practice
- Elements of an infection control program

Standard Precautions: A method of infection control that treats all human blood and other potentially infectious material as capable of transmitting HIV, HBV, HCV, and other bloodborne pathogens.

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a. Checking the employee's job classification and the tasks and procedures that they will perform to determine if there is a reasonably anticipated risk of exposure to blood or other potentially infectious material (OPIM).

b. Identifying the new job classifications and/or tasks and procedures, which will potentially expose the employee to blood or other potentially infectious materials.
c. Informing the Environmental Coordinator of all changes so records can be updated.

3. Assuring that proper exposure control procedures are followed as outlined in the "SOP" (standard operating procedures) in Appendix A and creating contingency plans for foreseeable circumstances that prevent following the recommended SOPs.

4. Assuring that appropriate personal protective equipment is available and in good working condition for all workers at risk of exposure to bloodborne pathogens.

5. Assuring that any employee who experiences an occupational exposure incident to blood or other potentially infectious materials is provided with post-exposure medical services as outlined in the "Post-Exposure Evaluation and Follow-Up" section of this document.

University employees, employee representatives, Students and regulatory authorities have access to the Exposure Control Plan through the EHS website at the link below:

Click here to enter EHS website

Exposure Determination

The following worker job classifications at the University are Category A due to anticipated occupational exposure to blood or other potentially infectious material (OPIM), regardless of frequency. The exposure determination is made without regard to the use of personal protective equipment:

School of Dentistry

Job Title	Department / Location
Research Technician	Dentistry
Dental Assistant	In all departments: Perio, OMS, Endo, Pedo, Dispensary, Ortho, AEGD/Faculty Practice, Dental Van and Community Programs) Dental Hygienist (in AEGD/Faculty Practice, Dental Van and Community Programs)
Radiology Technician (at UHC)	DMC, University Health Center
Dispensary Supervisor	Corktown and UHC
Dispensary Staff	Corktown and UHC
Manager	Faculty Practice

Wellness Center

Job Title	Department
Physician Assistant (PA)	Wellness Center
Nurse Practitioner (NP)	Wellness Center
Registered Nurse (RN)	Wellness Center

Athletics

Job Title	Department

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Assistant Director	Sports Medicine

Public Safety

Job Title	**Department**
Chief	Public Safety
Captain	Public Safety
Lieutenant (LT.)	Public Safety
Sergeant (SGT.)	Public Safety
Corporal	

Compliance Methods

Standard Precautions

The underlying concept of standard precautions is that workers must treat all blood and OPIM as if they are infected with a pathogen. Exposure prevention can be accomplished through a combination of engineering and work practice controls, use of personal protective equipment, and good housekeeping.

The only exception to the use of standard precautions is in unexpected, extraordinary circumstances involving the provision of healthcare or public safety services. An example would be a medical emergency where an employee is unable to put on gloves, don a gown, or tie on a facemask immediately. This DOES NOT mean that an employee can decide not to use personal protective equipment because they consider it impractical. It is only an option in rare situations where the employee decides that such equipment will prevent the proper delivery of medical care or emergency services, or it will create a greater hazard to their safety if such equipment is used.

After removal of personal protective equipment, workers are required to wash their hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water.

In the event of exposure to blood or OPIM, workers are required to wash their hands or any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible.

Needles and Sharps

Contaminated needles and other contaminated sharps must not be recapped, bent or broken. Under these circumstances, recapping or needle removal shall be accomplished by using a mechanical device or the one-handed technique. Immediately or as soon as feasible after use, contaminated sharps shall be placed in appropriate containers until properly reprocessed. These containers shall be:

- Puncture resistant
- Appropriately labeled and color-coded
- Leak proof on the sides and bottom
- Not handled in a manner that requires workers to reach by hand into the sharps container

Workplace Practices

Supervisors, working in conjunction with deans, directors, chairpersons, or designees will oversee the implementation of work practice controls in cooperation with EHS protocols. The department manager or supervisor will ensure that workers are trained to use work practice controls for their job classification and the tasks/procedures they perform. This training will be documented through the completion of 1 (f)3 (or)3sgnaon ahog4 (d t)3 (a)4d( )T7 -1214.04 -000

- When health care personnel's hands are visibly soiled, they should wash with soap and water. Note: Alcohol based hand rubs may be used by healthcare personnel for patient care.

- Contaminated needles and other contaminated sharps must not be bent, recapped or removed unless:

  - It can be demonstrated that there is no feasible alternative or the action is required by a specific medical procedure.
  - When recapping or removal of needles is required because there are no alternatives, a mechanical device or a one handed method must be used.

- Use mechanical means (i.e. tongs) when handling contaminated sharps when possible and eliminate hand-to-hand passing of sharp instruments.

- Contaminated sharps must be placed in appropriate containers immediately after use.

- Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses is prohibited in work areas where there is potential for exposure to bloodborne pathogens.

- Food and drink must not be kept in refrigerators, freezers, on countertops, or in other storage areas where blood or other potentially infectious materials are present.

- Mouth pipetting/suctioning of blood or other infectious materials is prohibited.

- Minimize splashing, spraying or other actions generating droplets of blood or other potentially infectious materials during all procedures. At a minimum, Biosafety Level 2 precautions are required for laboratories working with specimens of blood or body fluids. Contact the Environmental Coordinator for further information and assistance regarding these requirements.

- CPR barriers (i.e., mouth barrier, rescue masks, resuscitator) shall be used in place of direct mouth-to-mouth resuscitation when possible.

- Specimens of blood or other materials must be placed in designated leak-proof containers, appropriately labeled for handling and storage. If outside contamination of a primary specimen container is likely, that container must be placed within a second leak-proof container, appropriately labeled, for handling and storage. If the specimen can puncture the

Personal Protective Equipment

All

plan to remove the contaminated clothing as soon as possible. This clothing would be laundered at the University's expense. The clothing would be identified as contaminated and any employee, of any employer, exposed to it would be notified and protected from exposure.

Disposable gloves used at the University are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised. Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibits other signs of deterioration or when their ability to function as a barrier is compromised.

Broken glassware that may be contaminated will not be picked up directly by hand. A mechanical means, such as a brush and dustpan, tongs or forceps will be used. Reusable sharps containers that are contaminated with blood or OPIM shall not be stored or processed in a manner that requires workers to reach by hand into the containers.

Regulated Waste Disposal

All bins, pails, cans, and similar receptacles for regulated waste disposal shall be appropriately colored or labeled as containing biohazards[2] and shall be inspected[3], emptied and decontaminated on a regularly scheduled basis. Departments shall inform workers of the location of designated biohazard disposal containers and areas.

Autoclaves are available in various departments to decontaminate solid biohazardous waste. These departments will monitor this equipment to assure that proper sterilization occurs. Proper instrumentation will be used to verify that time, temperature, and steam are adequate. In addition, departments will provide an annual check of all autoclaves used for decontaminating biological wastes. Please contact the Environmental Coordinator for specifics regarding the annual autoclave check.

[2] Disposal of menstrual hygiene products and bandages or Kleenex used in self-administered first aid (bloody nose, small cut) are not considered regulated waste and will be disposed of in the normal waste stream.

[3] Inspection includes checking for contamination of waste bins/bags, overflow of bins/bags, and checking for any cracks and holes in regulated waste containment.

HIV and HBV Research Facilities

materials.

- Gloves will be worn when handling infected animals and when making hand contact with potentially infectious materials is unavoidable.

- Before disposal, all waste from work areas and animal rooms will either be incinerated or decontaminated by a method, such as autoclaving, known to effectively destroy bloodborne pathogens.

- Vacuum lines will be protected with liquid disinfectant traps and high efficiency particulate air (HEPA) filters, or filters of equivalent or superior efficiency and which are checked routinely and maintained or replaced as necessary.

- Hypodermic needles and syringes will be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle locking syringes or disposable syringe units (where the needle is integral to the syringe) will be used for the injection or aspiration of other potentially infectious materials. Extreme caution will be used when handling needles and syringes. A needle will not be bent, sheared, replaced in0 Tc 0 Tw -16.i4 (pl)-2 (a)pmden i3 ( )]TJ-10.8T[(r)3 (e)-2 (a)pme ec

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Hepatitis B Vaccine

The University will make the Hepatitis B vaccination series available to all employees who are determined to have occupational exposure. Vaccination will be:

- Made available at no cost to the employee within ten working days of initial assignment and after the employee has received training
- Made available at a reasonable time and place
- Performed by or under the supervision of a licensed health care professional
- Provided according to the recommendations of the U.S. Public Health Service current at the time of vaccination
- Recorded and filed in the employee's medical records HBV vaccinations will be provided at the Human Resources Department for employees at risk of occupational exposure.

HBV antibody testing will be provided if an employee desires such testing

Post- Exposure Evaluation and Follow -Up

All occupational exposures to human blood or other potentially infectious materials will

personnel.

- Human Resources will assure that the post exposure evaluation and follow-up outlined here is effectively carried out as well as to maintain records related to this policy.

- For the Corktown Campus and University Health Center location, please follow the Needlestick/Blood & Body Fluid Exposure Incident Protocol Flow Chart in Appendix D.

Interaction with Health Care Professionals

The University shall ensure that the health care professional who is responsible for the hepatitis B vaccination is provided with a copy of these rules and appendices. A written opinion shall be obtained from the health care professional who evaluates University employees. Written opinions will be obtained in the following instances:

- When the employee is sent to obtain the Hepatitis B vaccine

- Whenever the employee is sent to a health care professional following an exposure incident

- Health care professionals shall be instructed to limit their written opinions to:

- Whether the Hepatitis B vaccine is indicated and if the employee has received the vaccine, or for evaluation following an incident

- A statement that the employee has been informed of the Bdj (s)-1 (be)dent

Hazard Communication (Signs and Labels)

Signs

An employer shall post signs[1] at the entrance to work areas. The signs shall bear the following legend:

> [Name of infectious agent]
> [Special requirements for entering the area]
> [Name and telephone number of the laboratory director or other responsible person]

Labels

Labels shall be in compliance with all of the following requirements:

- Warning labels shall be affixed to containers of regulated waste, refrigerators and freezers that contain blood or other potentially infectious material, and other containers that are used to store or transport blood or other potentially infectious material.
- Labels shall be fluorescent orange or orange-red with lettering or symbols in a contrasting color.
- Labels shall either be an integral part of the container or shall be affixed as close as safely possible to the container by string, wire, or adhesive or by another method that prevents the loss of labels or the unintentional removal of labels.
- Red bags or red containers may be substituted for labels.
- Containers of blood, blood components, or blood products that are labeled as to their contents and that have been released for transfusion or other clinical use are exempted from the labeling requirements of this rule.
- Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment, or disposal are exempted from labeling requirements.
- Labels required for contaminated equipment shall be in accordance this sub rule and shall also describe which portions of the equipment remain

[1] These signs shall be fluorescent orange-red with lettering and symbols in a contrasting color.

        - Body Protection
        - Respiratory Protection
    - How to properly don, doff, adjust, and wear the required PPE
    - The limitations of the required PPE
    - The proper care, maintenance, useful life and disposal of the required PPE

- Post Exposure evaluation and follow-up

- Signs and labels used at the facility

- Hepatitis B vaccine program at the facility

HIV or HBV Research Facility Training

The principal investigator must provide specialized additional training for workers working in HIV or HBV research facilities before work with HIV or HBV begins. This training shall include:

- Employee's demonstration of proficiency in standard microbiological techniques and in the practices and procedures spearcttr

the training occurred and will be provided upon request to the employee, employee's representative, director of NIOSH, Assistant Secretary of Labor, and/or the MIOSHA.

Medical Records

Human Resources will maintain an accurate record for each employee with occupational exposure. These records include:

- Name of employee
- Copy of employee's hepatitis B immunization status, including dates of vaccinations and any medical records relative to the employee's ability to receive vaccination.
- Copy of the results of examinations, medical testing, and any follow-up procedures
- Copy of the healthcare professional's written opinion concerning hepatitis B vaccination and post-exposure evaluation and follow-up
- These records must be kept for the duration of employment plus 30 years.

Appendix A - SOP (Standard Operating Procedure s)

A Standard Operating Procedure (SOP) is a broad overview of safety procedures for hazardous processes. SOPs act as a training resource, in conjunction with a training program for workers, who may need a refresher or an introduction to handling hazards in a lab or healthcare setting. These documents may be specific to each department and some may be adopted to university standard for operating and handling hazardous tools, materials and processes.

This version of the SOP will be based off the requirements of the Bloodborne Pathogen Standard. Tasks like disinfecting work areas, handling of needles and other common procedures that may expose workers to blood and OPIM (other potentially infectious materials), should have an SOP created. When filling out this form, please be as clear and descriptive as possible and use full sentences. These forms should be approved by the supervisor of the department for final approval and to be filed electronically and physically, making it accessible to authorized personnel. If there are any questions or you need suggestions on what procedures to include, please contact the Environmental Coordinator at borderbl@udmercy.edu .

SOPs have 7 sections that include: approval/ training requirements, exposure potential, personal protective equipment, engineering controls, work practices, management of exposure incident and contingency plan. Below is the breakdown of what content should be in each section.

Approval and Training. In this section, you will list the trainings and supervision required to handle this tool/material/process. Is there a site specific bloodborne pathogen training? Is it required to have a supervisor present? Should workers be approved before using this tool?

Exposure Potential. In this section, you will explain the ways in which workers can be exposed to blood or other potentially infectious materials that results from the performance of an employee's duties. The risks will be determined without regard to personal protective equipment.

PPE (Personal Protective Equipment). What protective equipment is required to be safe while handling this tool/material or while completing this process? Be sure to include disposal and maintenance of the PPE required.

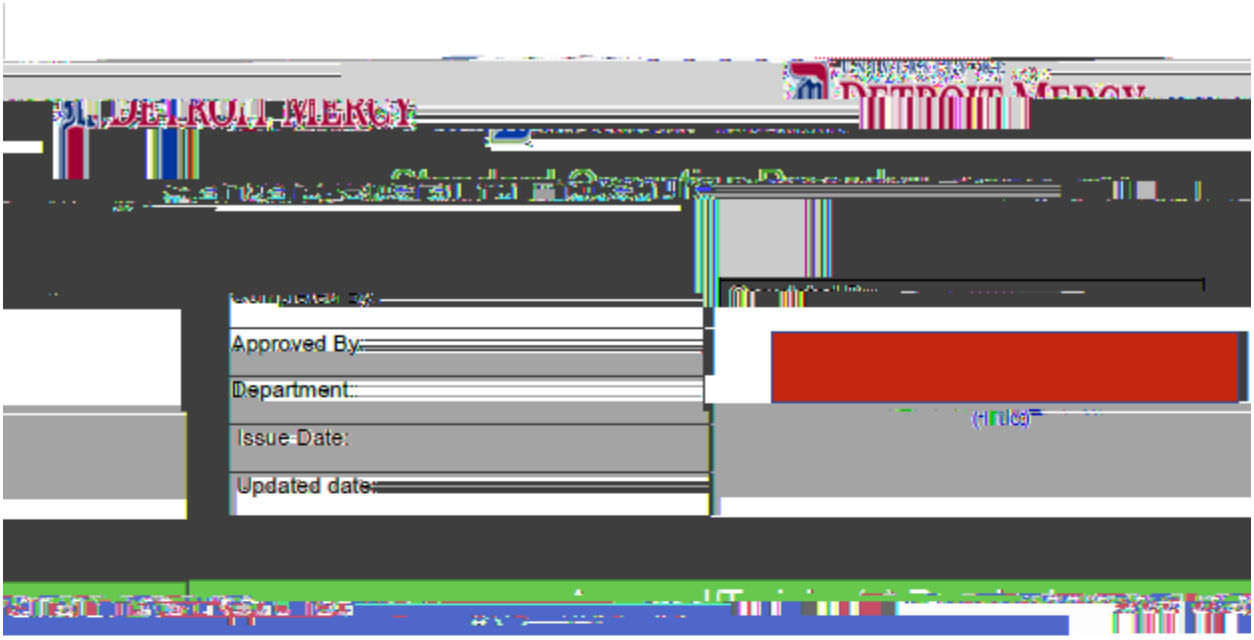
Engineering Controls. What tools have been given to minimize exposure? What hazards does it minimize? Most common examples are: Fume hoods, biological safety cabinet, vacuum devices, HEPA filters for a ventilation system, etc.

Work Practices. Explain workplace practices that are specific to the hazard or task, and general practices that minimize exposure. What are some rules to keep in mind before proceeding or working with this hazard? What are some general rules for cleanup and disposal once completed? Discuss general employee dos and don'ts in high exposure areas.

Management of Exposure Incidents. Explain immediate procedures in case of an exposure incident. Include immediate first aid recommendations, and any special instructions outside of

the Bloodborne Infectious Disease Control Plan.

Contingency Plan. If applicable, explain scenarios in which workers are not required to follow this SOP. How do we ensure workers are protected with these modifications?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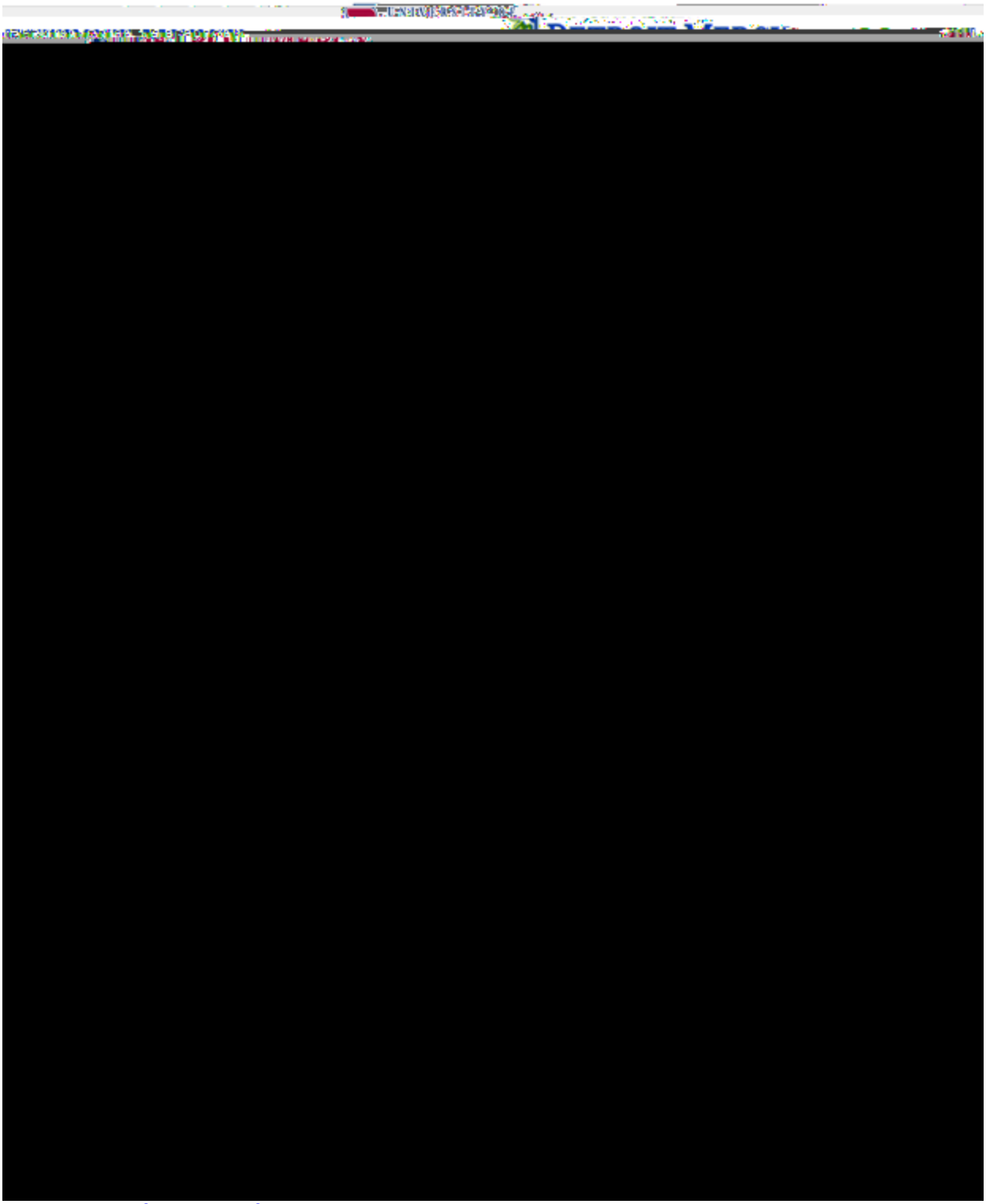

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