**Title: Procedure for Universal Precautions**

**Purpose:** The "universal precautions" or "universal blood and body-fluid precautions" procedure establishes guidelines for the safe handling of human specimens. It is based on the recommendations by the Center for Disease Control (CDC) and the Michigan Department of Public Health (MDPH) rules enacted on June 10, 1989 in Michigan in response to the Federal Medical Waste Tracking Act of 1988. This procedure is designed to maintain a safe laboratory environment for staff when using various human biological materials such as: blood, serum, plasma, tissues, saliva, urine and feces. "Universal precautions" states that blood and other body fluids from all patients should be considered potentially infectious.

**Procedure:**

1. Laboratory personnel are required to wear disposable gloves and a laboratory coat when handling human blood and other body fluids. Additional personal protective equipment such as masks, safety glasses and face shields are available in Room A122. These are to be used in order to protect staff’s mucous membranes from potential splashes when handling biohazardous material (when pipeting or dumping waste in the sink for example).

2. Non-sharp disposable items contaminated with human blood or bodily fluids should be placed in a white Occupational Safety and Environmental Health (OSEH) bucket. This bucket must first be lined with a Biohazard bag, with the top of the bag wrapping around the edge of the bucket, and must have a Biohazard label affixed to the outside of the bucket. Buckets are stored in room A122 by the sink and biohazard bags and labels may be found underneath the ACS-180 #1159 in the laboratory cabinet labeled with these supplies. In addition the bucket must also be labeled using an indelible pen (e.g. sharpie) indicating the room number in which it was used, either room A122 or A124. When the bucket becomes full, place the biohazard bag into the 55-gallon drum labeled “biohazard.” This drum is also lined with a plastic bag.

3. Sharps such as vacutainer needles or glass contaminated with human blood or bodily fluids must be placed using a mechanical device, such as forceps, into a separate white OSEH bucket lined with a biohazard bag, with the top of the bag wrapping around the edge of the bucket; it must also have a Biohazard label affixed to the outside of the bucket and be labeled using an indelible pen (e.g. sharpie) indicating the room number in which the bucket was used and the word “Biohazardous Sharps” written on the bucket and the cover. Never recap, bend or break vacutainer needles. When an OSEH bucket become full with waste, make sure that the biohazard bag including the top of the bag wrapping around the edge of the bucket is folded or twisted inside the bucket. Seal the bucket by hammering all around the outer rim of the cover until the cover is secure.
4. Sharps not contaminated with human blood or bodily fluids must be placed in plastic sharps containers or OSEH buckets labeled sharps.

5. Both OSEH buckets and drums are processed and disposed of by OSEH HAZMAT personnel. HAZMAT is an acronym for HAZardous MATerials. Contact OSEH HAZMAT at the North Campus Transfer Facility, 1655 Dean Road 2159, telephone # 763-4568 to arrange pickup if needed. CLASS is on an automatic pick up schedule. OSEH HAZMAT will also provide white OSEH buckets, drums and Biohazard labels when contacted with no charge to the department. Biohazard bags must be ordered by using the Procedure for Submitting Orders to be Processed.

6. After completion of specimen processing, remove protective blue pads when contaminated and place with other non sharp disposable items into an OSEH bucket as indicated in step #2. Also remove gloves by the following: first pull off one glove and then, while holding the glove in the fist of the still gloved hand, the other glove should be removed, inside out. The result is that one glove will be inside the other and no biohazardous materials will have touched the skin of the laboratorian directly. The gloves are to be discarded in a white OSEH bucket. After the removal of gloves, hands are to be washed.

7. Laboratory work surfaces are to be decontaminated with an appropriate germicide after a spill and when work is completed. A good germicidal agent is sodium hypochlorite (household bleach) prepared fresh daily in concentrations of 1:10. Label the bottle according to the Procedure for Labeling Secondary Reagent Containers. Scientific instruments should also be decontaminated after use.

8. As noted above, all persons must wash their hands after completing laboratory activities. In addition, all persons are to remove protective clothing and wash their hands before leaving the laboratory. Lab coats should never be worn while eating or drinking. Laboratory coats are to be laundered when needed through the University Laundry Service, which may be reached at 764-9320 and is located at 1665 Dean Road off of Hubbard Road. Please label lab coats with laboratorian’s name, the account number, Auxiliary Services Building and department name when dropping off laboratory coats.

9. If laboratory personnel are directly exposed to blood or body fluid via needlesticks, mucous membrane or broken skin contact, wash the affected area immediately, apply first aid, notify the injury to the CLASS Laboratory Manager and report to University of Michigan’s Work Connections Program ((734) 615-0643) within 24 hours. Illness/injury report forms are available on-line at www.umich.edu/~connect. Please refer to the Procedure for Employee Accident/ Illness.

10. Report spills of human biological materials immediately to the CLASS Laboratory Manager. Wear protective equipment such as lab coat, gloves, safety glasses. Contain/confine the spill to a small area. Do not track spill into other areas of the room or into other rooms. Clean by placing blue pads on the spill area, absorbing the spill with blue pad or paper towel and disposing of the blue pad or paper towel in the
OSEH bucket designated for non-sharp disposable items contaminated with biological material. Clean the area with sodium hypochlorite in a concentration of 1:10 and dry.