

University of Northern Colorado
Human Participants Internal Review Board

Protocol* For Research
Involving
Human Body Specimens

Precautions for Specimen Collection

1. Qualified personnel will be utilized for all specimen collection. “Qualified” refers to persons trained in the appropriate collection techniques and can demonstrate competence or skill such as phlebotomist, a nurse, etc.
2. All specimens are considered potentially infectious, thus all necessary precautions are employed. Orientation and training on disease transmission will be included as a routine procedure for all faculty, staff and students working in the laboratory.
3. Vinyl or latex gloves, safety glasses and lab coats are to be worn during all collection procedures, i.e., venipuncture, microsticks, catheterization, electrode placement, etc. Posted signs will appear in the laboratory reminding researchers to wear proper personal protective equipment. Gloves will be disposed of between participants.
4. Use an alcohol-based handrub before touching the participant, touching invasive equipment or donning gloves. Alcohol rub is used again after removing gloves. If visibly dirty or after contact with body specimens, hands should be washed with soap and water. (WHO, 2009)
5. Collection materials will **not** be used on multiple participants such as needles, syringes, catheters, alcohol swabs, cotton balls, bandaids, etc.
6. All disposable materials such as syringes, needles, and vacutainer tubes, etc. will be discarded in a sharp container (puncture resistant) provided within reach of the specimen collection site. All non-sharp bio hazardous materials (soiled cotton balls, materials used to cleanse and abrade skin, paper towels, gloves, etc.) will be placed in a red, labeled biohazard plastic bag or container. Containers will be disposed of as described in the section entitled “Procedures for Specimen Disposal.”
7. Needles from disposable syringes will not be recapped, bent, broken or touched, Vacutainer needles can be recapped using a recapping guard to disconnect the vacutainer holder from the needle.
8. Skin preparation for electrode placement will include minimal skin abrasion. Materials used to cleanse and abrade the skin will be disposed of immediately after use in the biohazard bag. If at all possible, disposable electrodes will be used. If electrodes are reusable, they will be disinfectant such as Cidex.

9. Body fluid (specimen) collection methodologies will vary between research studies, therefore, careful detail of all collection procedures must be explained in the IRB application.

Precautions when Handling Specimen

1. Gloves and safety glasses will be worn when handling, processing, or analyzing specimen.
2. Mechanical pipetts will be used, mouth pipetting is prohibited.
3. Specimen contamination on the outside of a container will be cleansed by a disinfectant such as Cidex.
4. Equipment/instruments will be disinfected before calibrating or repairing.
5. Hands will be washed after glove removal and after laboratory procedures involving human body fluids (specimen). It is not necessary to wear gloves while handling frozen samples in storage bags. Once the specimen container is removed from the storage bag, gloves will be worn and hands washed.
6. Gloves will be worn while carefully opening vacutainer tubes.
7. Soiled gloves are not to touch any person or area other than in the working area.
8. Soiled gloves will be disposed of in the red biohazard bag.

Procedures for Specimen Disposal

1. All sharps containers (puncture resistant) are to be sealed and labeled. The Environmental Health and Safety Office (Glenn Adams, Parsons Hall, ext 1149) will pick up and dispose of the biohazard containers properly. Bio-hazardous materials (bloody cotton balls, soiled paper towels, etc.) must be placed in a red container (i.e., red plastic bag) sealed and properly labeled.
2. Blood and urine within the containers may be poured down the drain and flushed with water. Waste treatment facilities can handle these substances.
3. Frozen specimen will not be stored in refrigerators or freezers which are used to store food for consumption. After thawing, dispose of specimen as described above.
4. Sharps containers will be replaced when 2/3 full to prevent an additional hazard.

Procedures for Accidental Exposure to Specimen

1. If accidental exposure such as a needle stick occurs, wash with soap and water. Squeezing the wound or using agents such as bleach have not been shown to be helpful (CDC, 2002). Subject shall seek medical attention at the UNC Health Center or from North Colorado Medical Center. Additionally, record the incident on the Injury/Illness Report Form/Worker's Compensation Report Form and report the incident to the UNC Personnel Office, Carter 2002 and to the appropriate department/school chairperson.
2. If specimen accidentally splashes or spills on the skin, wash immediately with soap and water.
3. Spills on counters or floors will be cleaned up by the researchers or the responsible party with absorbent materials (towels, paper towels), the area washed thoroughly with soap and disinfectant and materials disposed of properly. Wear gloves and safety glasses during clean-up. All materials will be disposed of in a biohazard bag.
4. Specimen spilled in the centrifuge will be soaked up with absorbent materials and disposed of properly. Wear gloves, and safety glasses. Broken glass will be picked up with forceps.

*protocol adapted from CDC, OSHA, and NCMC regulations

Centers for Disease Prevention (2002) Guidelines for Hand Hygiene in Healthcare Settings. October 25, 2002 / Vol. 51 / No. RR-16. Retrieved from <http://www.cdc.gov/handhygiene/Guidelines.html> on 9-21-2011.

World Health Organization (2009) WHO Guidelines on Hand Hygiene in Healthcare: Consensus Recommendations (pg 152). Retrieved from <http://www.cdc.gov/handhygiene/Guidelines.html> on 9-21-2011.