Victim Recovery Procedures

Once a missing miner has been located, the following procedures should be used by all teams to facilitate the removal of the body. When possible, victims should be recovered by Mine Rescue in a respirable atmosphere and under apparatus if needed. This may require teams to ventilate the explored area prior to the actual recovery of the victim.

Identification Teams (I. D. Team) should be selected to perform the tasks as outlined below. An I. D. Team should consist of Mine Rescue Team members and Mine Emergency Unit members (MEU) and/or State Officials. During any exploration or recovery, teams should not generally explore or recover bodies in water contacting the apparatus.

The Command Center should be notified immediately of any find/s. The decision to recover the body should be given from the Command Center. Once a team has been given approval to recover the body, the Command Center should be contacted once the recovery is complete and the team is ready to leave the Fresh Air Base and exit the mine. The team should provide the Command Center with an estimated time of arrival to the surface. Team members should follow protocol established by the Command Center. The Command Center should notify appropriate officials and coordinate arrival times.

Teams should call the Command Center from underground and request permission to exit with the body. The Command Center should coordinate their exit with the arrival of the appropriate officials.

The surface area of the mine where the transfer of the body is to take place should be guarded with limited access of persons at the transfer site.

- During body recovery, the mine rescue teams should remain a minimum of 25 feet away from the body if possible. Only the I. D. Team should approach the location.
- I. D. Team should consider the necessary Body Substance Isolation (BSI) protection needed by the situation and don it prior to approaching the body.
- The I. D. Team should first evaluate the conditions; map the area, including the position of the body, and any other relevant findings. Where possible, reference should be made to the closest spad number.
- The I. D. Team should mark the location with flagging and a tag.
- A tag and matching number of the location should be attached to the body.

- I. D. the body by the following methods:*
    1. Visual recognition
    2. Belt tag
    3. SCSR number
    4. Lamp number
    5. Detector number
    6. Mine tracking system identification number
    7. Name on miner's hat or any other identifying evidence.

  *If the I. D. Team chooses not to try to I. D. the body, they can proceed with the following steps and allow appropriate officials to do the I. D.

- Cover the body with sheet provided.

- When the team is given permission from the Command Center to collect and remove the body, they should don the necessary PPE (tyvek coveralls, latex gloves, eye and mouth/nose protection). The recovery team should use whatever means necessary to place body in a body bag insuring that all identification remains with the victim.

- Any team member assisting in the loading or handling of a victim should wear the same PPE as determined by the I. D. Team. Any handling or loading assistance should require a minimum of latex gloves.

- Bag should be tagged and may be placed into a stokes basket for safe removal from the mine.

- If multiple body parts are encountered, they should be labeled and mapped as previously described. They are to be placed into separate plastic bags, each labeled as to the content and location found. Multiple plastic bags may be placed in one body bag for removal from the mine. If it is determined that the multiple parts belong to one victim, they should be removed as one unit and not mixed with unknown parts.

- After collection and removal, Bio – Infectious clean up crystals should be poured or 9 to 1 water to Clorox sprayed on the mine floor at the site to reduce the possibility of accidental exposure during future activities.

- The man vehicle used for transporting the body should be lined with mining curtain on the inby end of the vehicle. The curtain should be opened to completely cover this part of the vehicle prior to placing the stokes basket in position. Any team member/s riding on this vehicle should sit or ride in the outby end of the vehicle. All other vehicles exiting the mine at this time should travel ahead of the vehicle carrying the body. Multiple bodies can be removed from the

mine at the same time. This should also be approved and coordinated by the Command Center.

- A decontamination area should be set up as close as possible where the bodies are recovered underground. At a minimum the decontamination area should consist of; appropriately sized boot wash, a 9 to 1 water to bleach mixture, and a bio-infectious container. Upon placing the body (bagged and in a stokes basket) in the man vehicle, the I. D. Team and any other persons assisting with the collection and removal should go to a decontamination area. The surface decontamination area should be used to; shower, rinse boots, clothing etc. as necessary to make for safe removal of BSI and place the used BSI in red bio-infectious bags. The bags should then be placed into the red bio – infectious barrel at the decontamination station.

- When the transport team reaches the surface they should exit the vehicle and await direction from the appropriate officials.

- The vehicle used to remove the body should be washed and cleaned according to BSI precautions. The curtain should be placed in bio – infectious collection with the other soiled materials.

- Following the MSHA debriefing, the team making the find and/or involved in the collection and removal may be asked to speak with a counselor.

- Any team member receiving an accidental exposure should report the event to officials in charge. Appropriate procedures should then be followed to ensure the health and safety of the team members.

Protocols from Center for Disease Control (CDC)

The purpose of these protocols is to protect care providers and patients from the transmission of blood borne pathogens (diseases). These pathogens are spread by blood, tears, sweat, saliva, sputum, gastric secretions, urine, feces, cerebral spinal fluid, semen, vaginal secretions, breast milk and any other potentially infectious material. The two major illnesses involved are Hepatitis (HBV) and Human Immunodeficiency Virus (HIV), which causes AIDS.

It has been recognized that blood is the single most important source of HBV or HIV contamination, thus the following protocols were established to provide reasonable protection from these pathogens.

Because medical history and examination cannot reliably identify all patients infected with HIV, HBV or other blood borne pathogens, blood and body fluid precautions shall be consistently used for all patients.

1. Universal Body Fluid Precautions shall be exercised with every patient.

2. Body fluids include: saliva, sputum, gastric secretions, urine, feces, CSF, breast milk, sero-sanguinous fluid, semen or any other drainage.

3. Procedures

    A. Individuals with abraded, lacerated, chapped, irritated, or otherwise damaged skin should be covered with appropriate protection.

    B. Gloves shall be worn with all patients. The gloves shall be impervious to blood or body fluids (latex gloves and PPE).

    C. Gowns or other protective clothing shall be worn if soiling of clothing with blood or body fluids may occur. Any exceptions to the wearing of protective clothing should be at the discretion of the care provider. The protection shall be impervious to blood or body fluids particularly in the chest and arm areas (PPE).

    D. A mask shall be worn if aerosolization of blood or body fluids may occur.

    E. Goggles, shield or glasses shall be worn when splattering of blood or body fluids may occur. (Safety glasses or goggles in PPE).

    F. Hand washing shall be done before and after contact with patients regardless of whether or not gloves were used. Hands contaminated with blood or body fluids shall be washed as soon as possible and

a report of possible exposure made to appropriate supervisor. (Hepistat Hand Cleaner).

G. Respiratory resuscitation: It is recommended that personnel refrain from oral contact with patient's anatomical airway without barrier protection. Adjunction aids shall be utilized. These include but are not limited to pocket masks (with one way valves) or Bag Valve Mask Resuscitators or Carevents.

H. Contaminated articles are to be placed in a color coded, non-permeable bag as well as all non-disposable articles soiled with blood or body fluids. Wear gloves when handling soiled articles. Sealed bio-infectious bags shall be brought to the surface and put into bio-infectious collection barrels. (The location to be identified by the Officials). Bloody or soiled non-disposable articles shall be rendered safe for handling prior to being placed back in service by proper cleaning.

I. Non-disposable linens (cloth blankets) should be placed in a color coded non-permeable bag and identified for laundry personnel as contaminated. Gloves shall be worn while handling soiled linens.

J. Blood spills should be covered with a chlorine based absorbent powder.
Concentrations of sodium hypochlorite (household bleach) ranging from approximately 1:100 dilution to clean equipment and 1:10 on direct spills shall be used. (Clean up kit at all First Aid/First Responder Stations).

K. If Advanced Life Support Teams provided advanced care, needles and syringes shall be disposed of in a rigid, puncture-resistant container labeled as "Contaminated Sharps." (Provided by Advanced Life Support Units).

L. NEEDLE STICKS OR BLOOD EXPOSURES: When a needle stick or blood exposure occurs, employee shall immediately cleanse the wound or wash off blood. The person exposed shall then report the exposure to officials, who should contact proper officals with the necessary information. The exposed employee should be offered vaccine and counseling if so desired.

M. All disposable bio-infectious materials, red bags, sharps, etc. should be placed in bio-infectious barrels. Bio-infectious barrels should be picked up as needed, but no later than every 30 days when bio-infectious materials are placed in them.