

UNIVERSAL PRECAUTIONS

UT Southwestern Medical Center

Content Objectives

- Definition of universal precautions
- Rationale for precautions
- Situations of risk
- Standards of universal precautions
- Exposure process

Universal Precautions

Universal precautions are a set of precautions designed to prevent transmission of HIV, hepatitis B virus and other bloodborne pathogens when providing first aid or health care. Under universal precautions, blood and certain body fluids of all patients are considered potentially infectious for HIV, HBV and other bloodborne pathogens.

Centers for Disease Control and Prevention

Department of Health and Human Services

An important safety measure


Universal precautions apply to:

blood

body fluids – cerebrospinal, synovial, pleural, peritoneal, pericardial, amniotic

tissues


semen, vaginal secretions



Universal precautions do not apply to feces, nasal secretions, sputum, sweat, tears, urine and vomitus *unless* they contain visible blood.

Universal precautions were implemented to protect health care providers.

- Between 1996-2004, 2140 incidents of significant occupational exposure to BBVs (bloodborne viruses) were reported to the Health Protection Agency Center for Infections.
- 47% (997/2140) of these health care workers were exposed to hepatitis C, 26% (551/2140) to HIV.

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- Over half of reported exposures occur during a procedure; over a third occur during disposal of clinical waste.

Medical Exposures:

2000 – 132

2007 – 200

Nursing Exposures:

2000 – 148

2007 – 191

“Many incidents of occupational exposure can be prevented if there is proper adherence to standard precautions for the safe handling and disposal of clinical waste.”

Professor Mike Catchpole, director of the HPA's Centre for Infections

More Information: *Eye of the Needle*

- This report by the Health Protection Agency reviewed the trends and number of incidents involving exposures, via needlestick injury or sharp objects, to patients with hepatitis B, hepatitis C and HIV.
- The Agency's research found that some healthcare workers injured at work with sharp objects or needles are still not going for appropriate tests and follow-up checks for hepatitis C, which puts them at unnecessary risk of developing chronic infections.

http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1227688080528

Opportunities for Exposures Abound ...

Phlebotomy



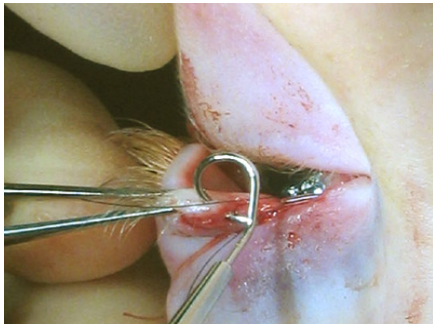
Working with sharps



Invasive procedures



Suture/staple placement



Needleboxes



Factors Contributing to Risk of Exposure:



- Patients unable to keep still during invasive procedures
- Lack of preparation for procedures – supplies not readily available
- Health care providers' rush to finish a task
- Attempts to multi-task
- Lack of attention to task at hand, inability to exclude distractions

How to Protect Yourself From Exposures:

1. USE APPROPRIATE BARRIER PRECAUTIONS routinely to prevent skin and mucous-membrane exposure when contact with blood or other body fluids of any patient is anticipated .

Wear gloves when at risk of touching blood and body fluids, mucous membranes, or non-intact skin of all patients and for handling items or surfaces soiled with blood or body fluids.

Wear masks and protective eyewear or face shields during procedures that are likely to generate droplets of blood or other body fluids to prevent exposure to mucous membranes of the mouth, nose, and eyes.

Wear aprons or gowns during procedures that are likely to generate splashes of blood or other body fluids.

2. **WASH HANDS** and other skin surfaces immediately and thoroughly if contaminated with blood or other body fluids. Wash hands immediately after gloves are removed.

3. To prevent needlestick injuries, **DO NOT RECAP NEEDLES**, purposely bend or break by hand, remove from disposable syringes, or otherwise manipulate by hand.

After use, place disposable syringes and needles, scalpel blades, and other sharp items in puncture-resistant containers for disposal. Do not leave items on work surfaces or trays.

How to Protect Yourself From Exposures:

4. **GLOVES ARE TO BE WORN** during handling of all lab specimens, which are to be treated as contaminated.
 - Use gloves when performing phlebotomy or when the health care worker has cuts, scratches, or other breaks in his/her skin.
 - Use gloves in situations where the health care worker judges that hand contamination with blood may occur, e.g., when performing phlebotomy on an uncooperative patient.
 - Use gloves for performing finger and/or heel sticks on infants and children.

5. **BLOOD OR BODY FLUID SPILLS** are to be cleaned up immediately; use the approved cleaning solution available in the clinical area.

6. **ALL WASTE** generated during the provision of care of all patients is to be considered infectious, and disposed of in hazardous waste containers; look for receptacles with red plastic liners. Examples include blood-soaked gauze, disposable drapes, contaminated gloves.

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7. Prior to a procedure, confirm that a puncture-resistant **SHARPS CONTAINER IS LOCATED AS CLOSE AS PRACTICAL** to the use area.

How to Protect Yourself From Exposures:

8. When filling blood tubes, **DO NOT FORCE BLOOD INTO THE TUBE**; let the tube fill passively using the encased negative pressure.
9. Obtain plenty of “holding help” for any procedures involving pediatric patients; try to keep needles or sharps out of the pediatric patients’ line of vision.
10. Safety devices are available in the clinical areas; use of these devices is strongly recommended as a part of universal precautions when required to use needles, scalpels, or other sharps.

You' ve been Exposed to Blood/Body Fluids: *Now What?*

NEEDLESTICK/SHARPS INJURY OR SKIN EXPOSURE:

1. Immediately wash the area copiously with soap and water.
2. Inform your supervisor or preceptor.
3. Page the Occupational Health Nurse on the 24-hour Exposure Pager at (214) 588-6263. The nurse will provide instruction about how to proceed.

MUCOUS MEMBRANE/EYE EXPOSURE:

1. If eyes, mouth, or nose are involved, flush with copious amounts of water or normal saline as soon as is feasible following exposure.
2. Inform your supervisor or preceptor.
3. Page the Occupational Health Nurse on the 24-hour Exposure Pager at (214) 588-6263. The nurse will provide instruction about how to proceed.

Additional References

Additional information on universal precautions and blood/body fluid exposures is available in hospital and Ambulatory Services policies.

The Centers for Disease Control and Prevention provide a comprehensive overview, accessible through this link:

http://www.cdc.gov/ncidod/dhqp/bp_universal_precautions.html