

**Bloodborne Pathogen** prevention - the concept has been dominate throughout healthcare and research settings for the past decade. The Occupational Safety and Health Administration (OSHA) finalized the bloodborne pathogen standard in December, 1991. Exposure determination, universal (standard) precautions, safe work practices, engineering controls, personal protective equipment have become integral to our practice settings. Education regarding the risk of transmission of bloodborne pathogens (BBP) as well as post-exposure follow-up and investigation of exposure incidents remain a cornerstone in all settings. Integral as these components may be, confusion periodically emerges as we transition to increasingly complex research and care delivery settings.

### Overview of components



- Exposure determination - reasonably anticipated contact with blood, body fluids, excretions or secretions as part of your duties.
- Universal or standard precautions - all blood, body fluids, excretions and secretions are considered potentially infected with Hepatitis B (HBV), Hepatitis C (HCV) or Human Immunodeficiency Virus (HIV).
- The concept applies to all patients, specimens, unfixed tissues or cultures. The concept is also extended to animals.



- Safe work practices - eliminate occupational exposure or reduce it to the lowest feasible extent.
- Engineering controls - devices are designed to reduce or eliminate the hazard (examples: biosafety hoods, resheathing hollow needles, blunt suture needles, retractable scalpel blades).
- Personal Protective Equipment (PPE) - gloves, gowns, masks, eye protection.

All of the above components have been utilized extensively throughout research and healthcare settings and are the professional standard of practice. Yet, exposures continue to occur. Consider the following in our ever-changing environments which challenge our creativity to achieve the safest work environment.



- Are you at risk for exposure to blood, body fluids or other potentially infectious materials?
- Do you always use standard precautions for all contact with blood, body fluids, secretions, excretions regardless of what you think you know regarding the source?
- As you develop or modify new procedures or implement new techniques, have you thought through the safest approaches? Have you "dry-run" tested your approaches to verify if safety is intrinsic to the approach?



- Have you evaluated and implemented engineering controls? Are they first generation or third? How passive and intuitive are the devices?
- Do you consistently wear all PPE? Have you modified procedures or practices and not modified the required PPE?
- Do you report all BBP exposures?
- Have you been immunized against Hepatitis B?