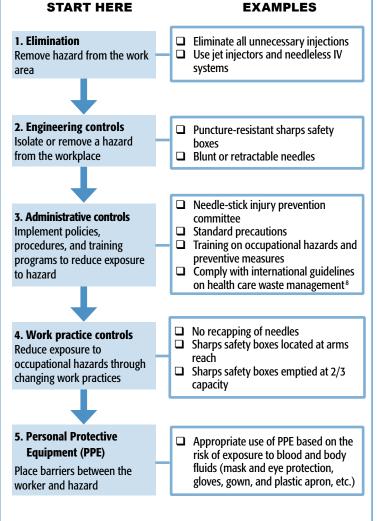
Comprehensive Approach to the Prevention of Occupational Transmission of Blood-borne Pathogens Among Health Workers

Key Elements at a Glance

1. Apply hierarchy of controls

Methods to control the transmission of blood-borne pathogens (BBPs) in order of effectiveness. The optimal prevention measure is to eliminate the hazard directly at the source.



2. Provide training to health workers

Health workers need to know their risk and how to protect themselves against blood-borne pathogens **Key training components include**:

- Risk of infection and mode of transmission; and efficacy of preventive measures
- Legal rights and obligations related to occupational health and safety
- Reporting procedures for needle-stick injuries and other blood and body fluid exposures
- Practice on the proper use of personal protective equipment
- Regular updates, training, and orientation on new products and procedures

3. Implement standard precautions

Standard precautions are a simple set of effective practices designed to protect health workers and patients from infectious pathogens from recognized and unrecognized sources. **These include:**

- Ensure hand hygiene products availability (e.g., clean water, soap, single-use clean towels, alcohol-based hand rub)
- Comply with WHO hand hygiene practices⁹
- No recapping of needles
- □ Use and availability of puncture- and liquid-proof sharps safety boxes at site of use
- Use proper personal protective equipment based on the type of exposure to blood (gloves, gown, mask and eye protection, face shield, etc.)
- Use gloves for contact with blood, non-intact skin, and mucous membranes
- Cover all cuts and abrasions on workers with a waterproof dressing
- Clean spills of blood promptly and carefully

4. Ensure access to post-exposure management

- Implement guidelines to include first aid, reporting mechanism, and procedure to be followed for post-exposure follow-up (risk assessment, prophylaxis, and management)
- Provide a conducive, blame-free, and confidential environment to workers reporting exposure
- Where possible and indicated, provide post-exposure prophylaxis (hepatitis B immune globulin for positive source) and hepatitis B vaccine if not previously immunized
- Record exposure by using a standard surveillance system (e.g., EPINet¹⁰)
- Use exposure record data for prevention by recommendations for changes in policy, practices or products

Tools to prevent exposure to BBPs

PAHO, WHO, and the United States National Institute of Occupational Safety and health (NIOSH) have developed a free toolket amed at previnting BBP transmission:

'Protecting Healthcare Workers: Preventing Needlestick Injuries Toolket'

http://www.who.int/occupational_health/activities/pnitoolkit/en/index.html (English) http://www.who.int/occupational_health/activities/pnitoolkit/es/index.html (Spanish) Additional resources: Workers' Health and Safety in the Health Sector:

http://www.bvsde.ops-oms.org/sde/ops-sde/ingles/bv-saludtrab.shtml

References

- 1. http://www.who.int/quantifying_ehimpacts/global/7sharps.pdf
- 2. http://www.who.int/wer/2004/en/wer7928.pdf
- 3. http://www.who.int/gb/ebwha/pdf_files/WHA60/A60_R26-en.pdf
- http://www.who.int/immunization/topics/hepatitis_b/en/index.html
 http://www.who.int/vaccines-documents/DocsPDE01/www613.pdf
- 5. http://www.who.int/vaccines-documents/DocsPDF01/www613.pdf 6. http://www.paho.org/English/AD/FCH/IM/fieldguide_pentavalent.pdf
- ftp://ftp.cdc.gov/pub/Publications/mmwr/rr/rr4618.pdf
- http://www.who.int/water_sanitation_health/medicalwaste/hcwdmguide/en/
- 9. http://whqlibdoc.who.int/hq/2005/WHO_EIP_SPO_QPS_05.2.pdf
- 10. http://www.healthsystem.virginia.edu/internet/epinet/about_epinet.cfm

Source: Workers' Health Project, Sustainable Development and Environmental Health Area, PAHO (http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=1399&Itemid=1340).