
Knowledge Toolbox To Prevent the Spread of Blood-borne Diseases

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PROCESS



Before¹



During²



After³

OBJECTIVES

- Basic understanding of HIV, Hepatitis B & C
 - Explain how HIV, Hepatitis B & C are transmitted
 - Treatment for HIV, Hepatitis B & C
 - Prevention of HIV, Hepatitis B & C
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BASIC UNDERSTANDING

DISEASE	PATHOGEN	DAMAGE	OUTCOME
HIV	Human Immunodeficiency Virus	Immune System	Chronic Condition managed w/medical care. Unmanaged develop into AIDS (Acquired Immunodeficiency Syndrome)
Hepatitis B	Hepatitis B Virus	Liver	10% Adults develop chronic disease. Medical care & life styles can help reduce further complication.
Hepatitis C	Hepatitis C Virus	Liver	70-85% develop chronic disease. 70% go on develop active disease can lead to cirrhosis & liver cancer. Treat & cure with medical care.

TRANSMISSION

DISEASE	INFECTED SOURCE +	SUCEPTIBLE SOURCE	RISK
HIV	Blood, sex, injecting drugs, mother to child, environment	Break in skin Mucous Membranes, MM Child at birth	Puncture:0.3% MM: 0.09% Non-intact skin <0.09%
HEPATITIS B	Blood, sex, saliva, injection drugs, mother to child. environment	Break in skin Mucous Membranes, MM Child at birth.	50% cases asymptomatic Virus can survive outside body couple weeks
HEPATITIS C	Blood, sex, injecting drugs, mother to child environment	Break in skin Mucous Membranes, MM Child at birth	Puncture: 1.8% MM: < 1.8% reported virus can live outside body for extended periods, very hardy virus

When are Bloodborne Disease NOT Transmitted

- Casual Contact (a hand shake or hug)
 - Sharing same home or work space
 - Sharing food, eating utensil, dishes
 - Hot tub or swimming pools
 - Urine, tears, sweat, stool, sputum
 - Saliva
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TREATMENT & PREVENTION

DISEASE	TREATMENT	PREVENTION
HIV	Medical Care Chronic condition lifelong care and management	Universal Precautions PEP if exposed Healthy Lifestyle
HEPATITIS B	Medical Care If chronic state develops - antiviral drugs	Vaccine Universal Precautions PEP if exposed Healthy Lifestyle
HEPATITIS C	Medical Care If chronic state - combination of drug therapy	Universal Precautions Healthy Lifestyle

PREVENTION

- UNIVERSAL PRECAUTIONS: Avoid direct contact with blood and body fluids
 - HOW?
 - Administrative Measures
 - Standard Operating Procedures
 - Training
 - Use of Safety Devices
 - Gloves
 - Eyewear
 - Mask or Face Shields – splash concerns
 - Gowns – as applicable
 - Blood Spill Kit
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Needle Stick or Other Direct Blood Exposure – What Next

- 3 critical steps
 - Wash the exposed area
 - Break in the skin – soap and water
 - Nose and mouth – flush thoroughly with water
 - Eyes – clean with water, saline or sterile solution
 - Report incident to your supervisor, follow your work's standard operating procedure.
 - Immediately seek medical treatment.
 - Clinicians' Post Exposure Hotline (PEP line) at 1-888-448-4911 or <http://www.nccc.ucsf.edu/> ⁴
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SUMMARY

- HIV, Hepatitis B & C are all viruses with the potential for chronic conditions
 - Transmission: Blood, Sex, IDU, Mother-child
 - Treatment: Medical Care various drug therapies and healthy lifestyle
 - Prevention: **Practice of Universal Precautions** and Hep B vaccine.
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Questions

Thank you and Be safe

Reference

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