PRESENTATION ON NEEDLE PRICK AND PROPHYLAXIS





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SAFE NEEDLE PRACTICES

WHAT IS MEANT BY SAFE INJECTION PRACTICE ?

ANY INJECTION GIVEN BY OUR HEALTH CARE PROVIDER TO DRAW BLOOD SAMPLE OR GIVE ANY MEDICATION WHICH DOES NOT HARM THE RECIPIENT(PATIENT) AND DOES NOT EXPOSE THE PARAMEDICAL STAFF TO ANY AVOIDABLE RISK AND EVEN DOES NOT RESULT IN WASTE THAT IS DANGEROUS FOR THE COMMUNITY.



RISK FACTOR

- MAINLY TRANSMISSION OF BLOOD BORNE PATHOGEN OCCURS PRIMARILY BY ACCIDENTAL PUNCTURE WOUND FROM CONTAMINATED NEEDLES.

- EVERY YEAR APPROXIMATELY 10% OF OUR PARAMEDICAL STAFF EXPERIENCE AN ACCIDENTAL PUNCTURE WOUND FROM A HOLLOW BORE NEEDLE OR SUTURING NEEDLES.

Table 4.1 Average Risk of Transmission for Bloodborne Pathogens

Type of Exposure	Source	Risk per Exposure	Exposures per Infection
Needlestick Injury	HBV (+) Blood	22 – 31%	3 – 4.5
Needlestick Injury	HCV (+) Blood	1.8%	56
Needlestick Injury	HIV (+) Blood	0.3%	333
Mucous Membrane	HIV (+) Blood	0.09%	1,111

HIGH RISK INDIVIDUALS

- DOCTORS
- PATIENTS
- PARAMEDICAL STAFF - NURSES FEMALE AND MALE
- PATHOLOGY DEPTT STAFF
- OT TECHNICHIANS
- ATTENDANTS
- SANITATION WORKERS
- HOUSE KEEPING STAFF – LAUNDRY WORKERS
- GARBAGE DISPOSAL WORKERS – BMW WORKERS

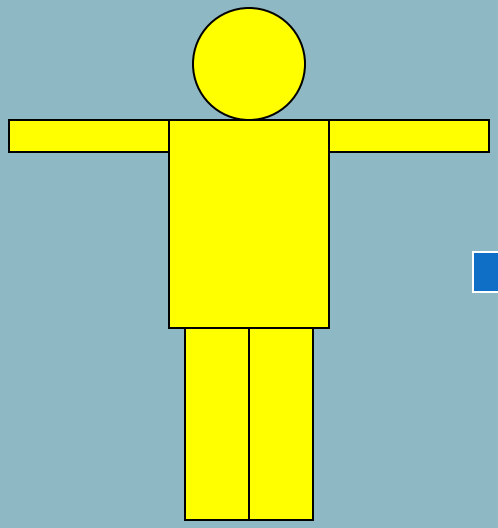




TRANSMISSION OF PATHOGENS VIA CONTAMINATED EQUIPMENT OR MEDICATIONS

SOURCE

INFECTIOUS PERSON,
Eg : CHRONIC, ACUTE



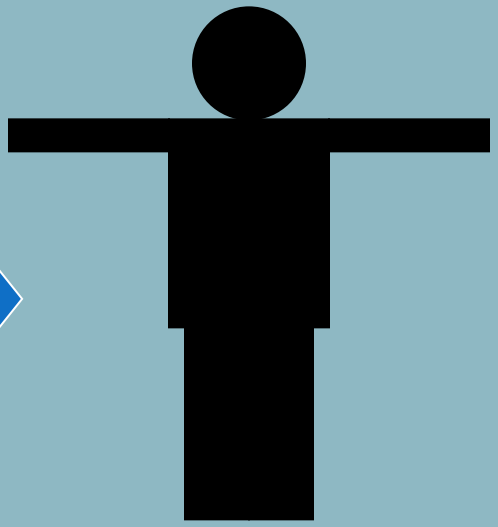
MEDIUM

CONTAMINATED SHARPS OR MEDICATION



CASE

SUSCEPTIBLE,
NON-IMMUNE PERSON



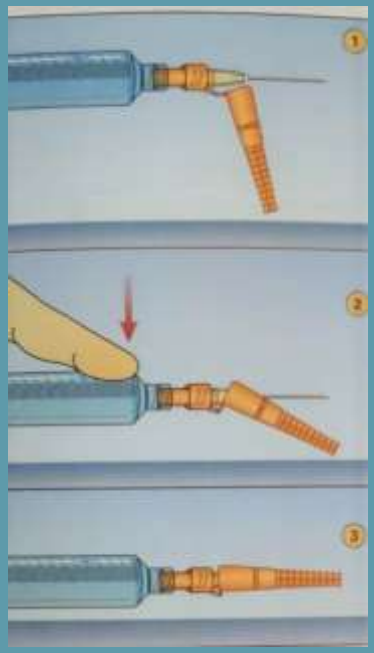
INCORRECT PRACTICES THAT RESULT IN TRANSMISSION OF PATHOGENS

- **USING THE SAME SYRINGE TO ADMINISTER MEDICATION TO MORE THAN ONE PATIENT, EVEN IF THE NEEDLE WAS CHANGED**
- **USING A COMMON BOTTLE OF SALINE OR OTHER IV FLUID FOR MORE THAN ONE PATIENT**
- **ACCESSING THE BOTTLE WITH A SYRINGE THAT HAS ALREADY BEEN USED TO FLUSH A PATIENT'S IV OR CATHETER**
- **ACCESSING A SHARED MEDICATION VIAL WITH A SYRINGE THAT HAS ALREADY BEEN USED TO ADMINISTER MEDICATION TO A PATIENT**

BASIC SAFETY TECHNIQUES

- CONSENT SHOULD BE TAKEN BEFORE DOING ANY PROCEDURE FROM THE PATIENTS
- MAINTAIN ASEPTIC CONDITION TO PREVENT ANY CONTAMINATION
- PROPER HAND HYGIENE SHOULD BE PERFORMED BEFORE HANDLING MEDICATIONS
- LEFTOVER PARENTERAL MEDICATIONS SHOULD NEVER BE POOLED FOR LATER ADMINISTRATION
- A NEEDLE SHOULD NEVER BE LEFT INSERTED INTO A MEDICATION VIAL SEPTUM FOR MULTIPLE USES
- ONE HANDED RECAPPING TECHNIQUE K/A SCOOP TECHNIQUE
- USE OF GLOVES AS AND WHEN NECESSARY
- USE OF SINGLE DISPOSABLE SYRINGE FOR INDIVIDUAL PATIENT





POST EXPOSURE PROPHYLAXIS(PEP)-HIV

- IF NEEDLE PRICK IS SUSPECTED PROPHYLACTIC TREATMENT SHOULD BE STARTED WITH IN 36 HRS POSITIVELY
- ELISA AND WESTERN BLOT OR IMMUNOFLOURESCENT ANTIBODY ASSAY ARE TESTS TO DETECT INFECTION
- SERIAL ASSAY FOR HIV ANTIBODIES ARE RECOMMENDED AT 6 WEEKS, 3 MONTHS AND 6 MONTHS AFTER THE EXPOSURE

Table 4.2 Postexposure Prophylaxis for HIV Infection

Exposure Type	HIV Status of Source Patient: HIV(+): Class 1†	HIV(+): Class 2†	HIV(−)
Needlestick Injuries			
Less Severe[1]	2 drugs	≥3 drugs	No drugs
More Severe[1]	3 drugs	≥3 drugs	No drugs
Mucous Membrane Exposures			
Small Volume[2]	2 drugs (?)[5]	2 drugs	No drugs
Large Volume[2]	2 drugs	≥3 drugs	No drugs

- IF NO PRE EXPOSURE PROPHYLAXIS IS TAKEN OR THE ANTIBODY TITRE IS LOW EVEN AFTER TAKING PREP THEN--
- USUALLY TWO DRUG REGIMEN IS PREFERED I.E
- ZIDOVUDINE + LAMIVUDINE TWICE A DAY REGIMEN FOR 28 DAYS

SIDE EFFECTS OF PEP

- NAUSEA
- FATIGUE
- DIARRHOEA
- MALAISE

POST EXPOSURE PROPHYLAXIS – HEP B

Vaccination Status / Exposure Type	HBV Status of Source Patient: HBsAG(+)	HBsAg(–)
Not vaccinated	HBIG (0.06 mL/kg IM) and start HBV vaccination	Start HBV vaccination
Vaccinated and Immune†	No treatment	No treatment
Vaccinated and Not Immune†	HBIG (0.06 mL/kg IM) and repeat HBV vaccination* or HBIG x2§	Repeat HBV vaccination*

PRE EXPOSURE PROPHYLAXIS FOR PREVENTION

- HEPATITIS B VACCINE IS GIVEN IN THREE DOSES ACC TO FOLLOWING SCHEDULE—

- FIRST TWO DOSES GIVEN 4 WEEKS APART
- THIRD DOSE ADMINISTERED 5 MONTHS AFTER 2ND DOSE





WE ARE VALUABLE NOT ONLY FOR SELF BUT ALSO FOR OUR PATIENTS
SO PLEASE TAKE CARE AND BE VIGILENT!!



THANKYOU FOR YOUR PATIENCE

HAVE A LOVELY DAY

TAKE CARE