

Needlestick and Sharps Injury Policy



Purpose	Protection of faculty, students, staff, and healthcare workers from injuries and infections resulting from exposure to blood-borne pathogens
Prepared by	Department of Pathology / Administration
Reviewed By	Director medical Education
Approved By	Principal, Quaid-e-Azam Medical College, Bahawalpur
Custodian of the Policy	Administration
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1. Scope

This policy applies to all faculty members, students, residents, interns, nursing staff, allied health professionals, and support staff working or training at Quaid-e-Azam Medical College (QAMC) and its affiliated teaching hospitals.

The policy provides guidance for prevention, reporting, management, and follow-up of needlestick injuries and other occupational exposures to blood and body fluids.

2. Purpose

The purpose of this policy is to:

- Prevent occupational exposure to blood-borne pathogens.
- Ensure prompt and appropriate management of needlestick and sharps injuries.
- Minimize the risk of transmission of Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Human Immunodeficiency Virus (HIV), and other blood-borne infections.
- Promote safe handling and disposal of sharps.
- Ensure timely reporting, documentation, and follow-up of incidents.

3. Definitions

Needlestick Injury

An injury caused by penetration of the skin by a needle or other sharp object contaminated or potentially contaminated with blood or body fluids.

Examples include:

- Hollow-bore needles
- Suture needles
- Scalpels
- Lancets
- Razors
- Dental instruments
- Bone fragments or sharp tissues

Similar Exposure Incidents

Exposure to blood or potentially infectious body fluids through:

- Splash to eyes, nose, or mouth
- Contact with broken or non-intact skin
- Human bites causing skin penetration

Blood-Borne Pathogens (BBPs)

Microorganisms transmitted through blood and body fluids.

HBV

Hepatitis B Virus

HCV

Hepatitis C Virus

HIV

Human Immunodeficiency Virus

Post-Exposure Prophylaxis (PEP)

Medical treatment initiated after occupational exposure to reduce the risk of infection.

4. Policy Statement

QAMC is committed to providing a safe learning and working environment for all students, faculty, and staff.

All occupational exposures to blood and body fluids shall be treated as medical emergencies requiring immediate first aid, reporting, risk assessment, documentation, and appropriate follow-up.

The institution shall ensure:

- Availability of sharps disposal systems.
- Access to vaccination against Hepatitis B.
- Timely medical evaluation after exposure.
- Access to HIV post-exposure prophylaxis when indicated.
- Confidentiality of all records related to exposure incidents.

5. Risk Factors for Blood-Borne Virus Transmission

The risk of transmission increases with:

1. Deep percutaneous injury.
2. Injury from a hollow-bore needle.
3. Visible blood on the device.
4. Needle previously placed in a vein or artery.
5. High viral load in the source patient.
6. Source patient positive for HBeAg (for HBV).
7. Delayed reporting and delayed initiation of treatment.

6. Immediate Actions Following Exposure

A. First Aid Measures

For Needlestick or Cut Injury

- Encourage gentle bleeding.
- Do not squeeze excessively.
- Do not suck the wound.
- Wash immediately with soap and running water.
- Cover with a waterproof dressing.

For Eye Exposure

- Irrigate immediately with clean water or saline for at least 10–15 minutes.

For Mouth Exposure

- Rinse thoroughly several times with water.
- Do not swallow the rinse water.

For Skin Exposure

- Wash thoroughly with soap and water.

7. Reporting Procedure

The exposed individual must:

1. Report the incident immediately to:
 - Supervisor
 - Head of Department
 - Ward Incharge / Unit Head
2. Present to the designated Emergency Department or Occupational Health Service without delay.
3. Complete the Needlestick Injury Incident Report Form within 24 hours.

All incidents must be documented regardless of perceived risk.

8. Medical Evaluation and Management

The designated physician shall:

- Assess the exposure risk.
- Evaluate vaccination status.
- Obtain informed consent for testing.
- Arrange baseline investigations.

Baseline Tests

For Exposed Person:

- HBsAg
- Anti-HBs (if required)
- Anti-HCV
- HIV screening

For Source Patient (where consent and regulations permit):

- HBsAg
- Anti-HCV
- HIV screening

9. Post-Exposure Prophylaxis (PEP)

Hepatitis B

- Vaccinated individuals with documented immunity require no further action.
- Non-immune individuals shall receive Hepatitis B vaccine and/or Hepatitis B Immunoglobulin (HBIG) according to current guidelines.

HIV

Where indicated, HIV PEP should be initiated preferably within 2 hours and not later than 72 hours after exposure.

Treatment should continue according to national and institutional guidelines.

Hepatitis C

Currently no approved post-exposure prophylaxis exists. Exposed individuals shall undergo follow-up testing and clinical monitoring.

10. Follow-Up

Follow-up testing shall be arranged according to prevailing national and international guidelines.

The exposed individual shall receive:

- Medical follow-up
- Counseling
- Psychological support if required
- Confidential handling of records

11. Prevention of Needlestick Injuries

To reduce occupational risk:

1. Dispose of contaminated sharps immediately after use.
2. Use approved puncture-resistant sharps containers.
3. Place sharps containers close to the point of use.
4. Never pass sharps hand-to-hand when avoidable.
5. Avoid recapping needles.
6. If recapping is unavoidable, use the one-handed scoop technique or approved safety device.
7. Never bend, break, or manipulate used needles by hand.
8. Ensure portable sharps containers remain secure.
9. Replace sharps containers before they exceed three-quarters ($\frac{3}{4}$) capacity.

10. Maintain adequate stock of sharps disposal containers at all clinical areas.
11. Use safety-engineered devices whenever available.
12. Ensure all healthcare personnel receive annual training on sharps safety.

12. Responsibilities

Administration

- Provide resources and training.
- Ensure availability of vaccines and PEP.
- Maintain incident records.

Heads of Departments

- Promote compliance with this policy.
- Ensure reporting and investigation of incidents.

Faculty, Students and Staff

- Follow standard precautions.
- Report exposures immediately.
- Participate in training programs.
- Maintain vaccination status.

13. Policy Review

This policy shall be reviewed every three years or earlier if required by changes in PMDC, Punjab Health Department, infection prevention guidelines, or institutional requirements.

References

1. WHO Guidelines on Prevention of Occupational Exposure to Blood-Borne Pathogens.
2. CDC Guidelines for Management of Occupational Exposures.
3. National Infection Prevention and Control Guidelines, Pakistan.
4. PMDC Standards for Undergraduate Medical Education