**Needle stick incident protocol for (PI name) lab**

1. **Introduction**

The PI name laboratory will be working with:

* Please list all materials used with syringes or needles e.g.: human blood, human cell lines or cancer cell lines, viruses, bacteria, etc.

All employees with known or potential exposure to blood or human blood products must enroll with the [ASU Bloodborne Pathogens Program](https://www.asu.edu/ehs/documents/bloodborne-pathogens-plan.pdf) within 10 days of hire. This includes all employees anticipated to encounter bodily fluids. This program also provides the opportunity to receive Hepatitis B vaccination and/or titers, at no charge to the employee.

All personnel must complete and submit the Hepatitis B vaccination consent/ declination form, Appendix A in the [ASU Bloodborne Pathogens Plan](https://www.asu.edu/ehs/documents/bloodborne-pathogens-plan.pdf) (regardless of whether they are accepting the vaccine), along with any associated vaccine records, via their health portal to [ASU Employee Health.](https://cfo.asu.edu/employeehealth)

If working with human cancer cell lines please include the following information in this protocol:

Human cancer cell lines may have the potential to grow and form tumor nodules in healthy human hosts. Accidental inoculation of human cancer cells have led to the growth of local tumors which had to be removed surgically1, 2. In addition, human cell lines may have bloodborne pathogens present.

To minimize the risks of exposure to infectious materials, all personnel working in the PI laboratory are required to take the following trainings:

* Biosafety and Bloodborne Pathogen training offered by EHS Biosafety.
  + This training is required before work in the lab begins and annually thereafter.
* In addition, all personnel will be trained for their duties by senior lab personnel and informed of all potential risks associated with working in the laboratory.
* [Instructions to lab]: Please list any additional lab-required trainings or certifications.

**II. Needlestick Procedures**

**Human blood products, cancer cell lines or other microorganisms**

In the event of a needle-stick with possible exposure to bloodborne pathogens, human cancer cell lines or other microorganisms, immediately follow these steps:

1. Flush the exposed area with warm water.
2. Immediately squeeze the area to encourage gentle bleeding at the puncture site and reduce the possibility of exposure.
3. Wash exposed area with soap and water for at least 10 minutes, scrubbing vigorously.
4. Report the incident to lab supervisor at phone number.
5. Seek immediate medical attention at:

ASU Employee Health

1492 S. Mill Ave., Suite 105

Tempe, AZ 85281

602-496-1917

1. Complete the [incident report forms.](https://cfo.asu.edu/workplace-community-safety)
   1. If an ASU employee is injured or becomes ill from a work-related incident, the Arizona Department of Administration requires reporting and [additional forms](https://cfo.asu.edu/workplace-community-safety) to be completed in order to process Workers’ Compensation claims.

For emergencies, call 911.

If an injury is not life-threatening and does not require urgent medical care, please contact CorVel at **800-685-2877**. CorVel is a nurse triage service provided by the Arizona Department of Administration and provides telephone consultations for minor injuries.

If ASU Employee Health is closed or for satellite campuses, emergency care may be obtained at the nearest emergency room and reported to ASU Employee Health and EHS Biosafety/Biosecurity the next business day.

Select the trauma center nearest to your ASU campus listed below:

**Tempe Campus:**

HonorHealth Scottsdale Osborn Medical Center

7400 E Osborn Rd

Scottsdale, AZ 85251

480-882-4000

Banner Desert Medical Center

1400 S Dobson Rd

Mesa, AZ 85202

480-412-3000

**Downtown campus:**

**Banner University Medical Center**

1111 E McDowell Rd

Phoenix, AZ 85006

602-839-2000

**Polytechnic campus**

Chandler Regional Medical Center

1955 W Frye Rd

Chandler, AZ 85224

480-728-3000

**West campus**

**Banner Thunderbird Medical Center**

5555 W Thunderbird Rd

Glendale, AZ 85306

602-388-5555

**Mayo Clinic (Health Futures Center)**

**Mayo Clinic Emergency Department**

5777 E Mayo Blvd

Phoenix, AZ 85054

(480) 515-6296

The lab supervisor will report all incidents to EHS Biosafety/Biosecurity at 480-965-1823. Federal, state, and local agencies may also need to be notified depending on the nature of the accident/injury. If the project involves recombinant DNA, the [ASU IBC](https://researchintegrity.asu.edu/biosafety) will be required to report any significant problems with or violations of the [NIH Guidelines for Research with Recombinant or Synthetic DNA Molecules](https://osp.od.nih.gov/biotechnology/nih-guidelines/) and any significant research-related accidents or illnesses to the NIH as outlined in the [NIH Incident Reporting guidelines.](https://osp.od.nih.gov/biotechnology/nih-guidelines/)

**III. Needlestick Procedures**

Following a report of an exposure incident, the employee will be provided a confidential medical evaluation and follow-up. This follow-up must include documentation of the route(s) of exposure and the circumstances under which the exposure incident occurred, Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law. The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained. Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service; counseling; and evaluation of reported illnesses. ASU will provide this evaluation and follow-up through A[SU Employee Health](https://cfo.asu.edu/employeehealth) or personal healthcare professional.

1. Blood Collection and Testing

The exposed employee's blood shall be collected as soon as feasible and tested for HBV and HIV serological status after consent is obtained. ASU shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. Testing must be completed no later than 30 calendar days after the exposure incident. No later than 18 months after the date of the exposure incident, the employee will be retested. If an employee chooses not to complete the testing, that employee may jeopardize the availability of worker’s compensation benefits from the [Arizona Department of Administration, Risk Management Division.](https://staterisk.az.gov/)

1. Information Provided to the Healthcare Professional

The healthcare professional responsible for the employee’s Hepatitis B vaccination will be provided a copy of the [OSHA Bloodborne Pathogens Standard.](https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030) The healthcare professional evaluating an employee after an exposure incident will be provided the following information:

* A copy of the [OSHA Bloodborne Pathogens Standard.](https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030)
* A description of the exposed employee’s duties as they relate to the exposure incident.
* Documentation of the route(s) of exposure and circumstances under which exposure occurred.
* Results of the source individual’s blood testing, if available.
* All medical records relevant to the appropriate treatment of the employee including vaccination status which are the employer's responsibility to maintain

1. Evaluation of Incident

The circumstances surrounding the exposure incident will be investigated immediately by lab supervisor/PI name and EH&S Biosafety/Biosecurity. Information regarding the exposure incident, source material, and employee vaccination status will be provided to [ASU Employee Health](https://cfo.asu.edu/employeehealth) and/or the employee’s healthcare professional. Site-specific procedures will be reevaluated and revised by lab supervisor/PI as necessary to prevent recurrences of similar incidents. EHS Biosafety/Biosecurity is available to assist the PI name laboratory personnel with evaluating the following:

* + - * Engineering controls and work practices used at the time of the exposure.
      * A description of any devices being used (e.g., sharps, centrifuge, blender).
      * Protective equipment or clothing worn at the time of the exposure incident.
      * A review of the procedures being performed at the time of the incident.
      * A review of the employee’s training record.

**IV. Documentation and Recordkeeping**

A. Medical Recordkeeping

[ASU Employee Health](https://cfo.asu.edu/employeehealth) will establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29 CFR § 1910.1020. The record shall include:

• The name of the employee.

• A copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination as required.

• A copy of all results of examinations, medical testing, and follow-up procedures as required.

• The employer's copy of the healthcare professional's written opinion as required.

• A copy of the information provided to the healthcare professional as required. [ASU Employee Health](https://cfo.asu.edu/employeehealth) will ensure that employee medical records required are kept confidential and not disclosed or reported without the employee’s express written consent to any person within or outside the workplace except as required by the standard or as may be required by law. [ASU Employee Health](https://cfo.asu.edu/employeehealth) will maintain the records required for at least the duration of employment plus thirty years in accordance with 29 CFR § 1910.1020.

B. Employee Records

ASU is required to establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29 CFR 1910.1020. This record is maintained by [ASU Employee Health](https://cfo.asu.edu/employeehealth) and includes:

* + - * The name of the employee.
      * A copy of the employee’s hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical records relative to the employer’s ability to receive vaccination as required.
      * A copy of all results of examinations, medical testing, and follow-up procedures as required.
      * The employer's copy of the healthcare professional's written opinion as required.
      * A copy of the information provided to the healthcare professional as required.

ASU Employee Health will ensure that employee medical records required are kept confidential; and not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by the standard or as may be required by law. ASU Employee Health shall maintain the records required at least the duration of employment plus 30 years in accordance with 29 CFR 1910.1020.

C. Sharps Injury Log

ASU is required to establish and maintain a sharps injury log (see Appendix C) for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log must be recorded and maintained in such manner as to protect the confidentiality of the injured employee.   
[ASU Employee Health](https://cfo.asu.edu/employeehealth) maintains the sharps injury log. The sharps injury log must contain the following information:

* The type and brand of device involved in the incident.
* The department or work area where the exposure incident occurred.
* An explanation of how the incident occurred

The sharps injury log shall be maintained for the period required by 29 CFR 1904.33

D. Documentation of Updated Safe Practices

Consideration of changes in technology that reduce or eliminate exposure must be evaluated and documented annually including solicitation of input from non-managerial staff, EHS Biosafety/Biosecurity, Employee Health, and other outside individuals.

**References:**

1. OSHA BBP Standard. <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1030>

Strauss, D. C.; Thomas, J. M. Transmission of Donor Melanoma by Organ Transplantation. Lancet Oncol. 2010, 11 (8), 790–796.

2. SCANLON, E. F.; HAWKINS, R. A.; FOX, W. W.; SMITH, W. S. FATAL HOMOTRANSPLANTED MELANOMA: A CASE REPORT. Cancer 1965, 18, 782–789.