**Needle Stick Incident Protocol for (PI name) Lab**

1. **Introduction**

The PI name laboratory will be working with (please list all materials used). 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 Biosafety and Bloodborne Pathogen training offered by EH&S 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. All personnel working with these materials will be offered the Hepatitis B vaccination free of charge as outlined in the ASU Bloodborne Pathogens Plan. If the worker declines the vaccination, a signed declination form will be kept on file.

**II. Needlestick Procedures**

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

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

1. Gently squeeze the area to encourage gentle bleeding and reduce the possibility of exposure.
2. Wash exposed area with soap and water.
3. Report the incident to lab supervisor at phone number.
4. Seek medical attention immediately at:

ASU Health Services (Tempe)

451 E. University Dr.

Tempe, AZ 85287-2104

 (480) 965-3349

1. If ASU Health Services is closed, emergency care may be obtained at the nearest emergency room and reported to ASU Health Services and EH&S Biosafety/Biosecurity the next business day. **ASU After Hours Medical Advice at 480-965-3349**. The nearest emergency room from ASU Tempe campus is:

Tempe St. Luke’s Hospital

1500 South Mill Avenue

Tempe, AZ 85281

(480) 784-5500

1. Lab supervisor name will report the incident to EH&S. The EH&S direct phone number is: (480) 965-1823.
2. Fill out the [Report of Injury](http://www.ica.state.az.us/Claims/Forms/Claims_EmployerReportOfInjury.pdf). The form should be filled out within 24 hours of an accident or injury. Privacy and confidentiality procedures will be followed.
3. Post-exposure evaluation is required as determined by the medical provider.

In addition, whenever someone is injured or becomes ill from work-related incidents, the Arizona Department of Administration (ADOA) requires the following forms to be completed within 48 hours in order to process Worker’s Compensation Claims:

* Employer Report of Injury:

<https://www.asu.edu/hr/forms/wcformspacket.pdf>

* EHS Incident Report:

<https://cfo.asu.edu/incident-reporting>

Lab supervisor name will report all accidents and injuries to EH&S Biosafety/Biosecurity. 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 [IBC](http://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](http://oba.od.nih.gov/rdna/nih_guidelines_oba.html) and any significant research-related accidents or illnesses to the NIH within 30 days.

1. **Post-Exposure Evaluation and Follow-Up**

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 testing of the source individual’s blood if available, collection and testing of the employee’s blood, post-exposure prophylaxis (when medically indicated), evaluation of reported illnesses, and counseling. ASU will provide this evaluation and follow-up through ASU Health Services or contracted health care providers at no cost to the employee.

* 1. **Blood Collection and Testing**

The exposed employee’s blood must be collected no later than 10 calendar days after the exposure incident. Serological testing for HIV, HBV, and HCV will be performed after consent is obtained; a healthcare professional’s written opinion will be made available within 15 days after 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](http://www.azrisk.state.az.us/).

* 1. **Information Provided to the Health Care Provider**

The health care professional responsible for the employee’s hepatitis B vaccination will be provided a copy of the [OSHA Bloodborne Pathogens Standard](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&amp;p_id=10051). The health care professional evaluating an employee after an exposure incident will be provided the following information:

* A copy of the [OSHA Bloodborne Pathogens Standard](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&amp;p_id=10051).
* 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.
	1. **Evaluation of Incident**

The circumstances surrounding the exposure incident will be investigated immediately by lab supervisor/P name. Information regarding the exposure incident, source material, and employee vaccination status will be provided to ASU Health Services and/or the employee’s health care provider. Site-specific procedures will be reevaluated and revised by lab supervisor/PI as necessary to prevent recurrences of similar incidents. EH&S Biosafety/Biosecurity is available to assist the PI name laboratory personnel with evaluating the following:

* + 1. Engineering controls and work practices used at the time of the exposure.
		2. A description of any devices being used (e.g., sharps, centrifuge, blender).
		3. Protective equipment or clothing worn at the time of the exposure incident.
		4. A review of the procedures being performed at the time of the incident.
		5. A review of the employee’s training record.
1. **Documentation and Recordkeeping**
	1. **Medical Recordkeeping**

ASU Health Services will establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29 CFR § 1910.203 The record shall include:

* The name and social security number 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.
* A copy of all results of examinations, medical testing, and follow-up procedures required.
* The copy of the healthcare professional’s written opinion as required.
* A copy of the information provided to the healthcare professional as required.

ASU Health Services 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 Health Services will maintain the records required for at least the duration of employment plus thirty years in accordance with 29 CFR § 1910.204.

* 1. **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 Health Services and includes:

1. The name and social security number of the employee.
2. 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.
3. All medical records pertaining to an exposure incident and follow-up evaluation. All documentation will be held under strict confidentiality guidelines.
	1. **Sharps Injury Log**

ASU is required to establish and maintain a sharps injury log (see Appendix B) for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log shall be recorded and maintained in such manner as to protect the confidentiality of the injured employee. The sharps injury log will be maintained by lab supervisor/PI and a copy will be provided monthly to EH&S Biosafety/Biosecurity at biosafety@asu.edu. The sharps injury log will contain the following information:

* + 1. The type and brand of device involved in the incident.
		2. The laboratory in which the exposure occurred.
		3. An explanation of how the incident occurred and personnel involved.
	1. **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.

**References:**

1. 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.