

BU Agent Incident Reporting Summary October to December 2019

**CAMPUS	Date of Incident	Incident Type/Agent Involved	BSL	Transmissible Person to Person	Description	*Reportable Incident	Report of Clinical Illness	Agency Reported To	Comments/Corrective Actions
BU Medical Campus (BUMC)									
BUMC	10/1/19	Respiratory symptoms when working in Anatomy room	BSL2		A 1st year medical student called ROHP at 9:30 am today at the recommendation of their student health clinician to report he has felt tightness and burning in his chest with shortness of breath "worse" when working in the Anatomy Dissecting room with symptoms continuing afterwards. He reports he has worked in the lab wearing gloves, plastic eye glasses, scrubs and a plastic apron and mask for 2 to 2.5 hours at a time.  He will be following up with Student Health this evening.	No		N/A	This incident is being followed up.
BUMC	10/7/19	Clean mouse bite to right index finger	ABSL2		At 11:30 am today, a trainer at BUASC called ROHP to report that a graduate student was bitten by a BSL1 mouse in the training lab (on the BUMC) today. The graduate student was participating in a training related to mouse handling. Wearing one pair of gloves, he was holding a mouse's tail with his right hand and restraining the mouse with his left hand. The mouse was able to turn its head and bite the graduate student's right index finger. He immediately reported the bite and washed the wound for a couple of minutes with soap and water. The mouse was placed back in its cage safely. After talking with an NP from ROHP on the phone, the graduate student resumed his training.	Yes		BPHC	This incident was attributed to inexperience. EHS advised the student follow up to complete additional animal handling training to acquire sufficient skills and expertise prior to performing animal related tasks independently.
BUMC	10/30/19	Needle stick to left index finder	ABSL2		A right hand dominant research technician wearing one pair of gloves, and lab coat accidentally stuck her left index finger with a syringe containing ketamine and xylazine solution (concentration of 17.5mg/ml of ketamine and 2.5mg/ml of xylazine) as she went to adjust the dose in the syringe in an ABSL2 lab. She denies injecting any fluid into her finger. She had used the syringe on three mice prior to this needle stick. She had used it on two wild type mice and one PS19 transgenic mouse (all mice were 3 months old and not sick) that express the mutant form of human (MAPT) under the direction of the mouse prion protein promoter. I spoke with the research assistant professor who clarified that these mice were nontoxic and non-infectious to humans.	Yes		BPHC	This incident was attributed to not being conscientious. The transgenic mouse line was commercially sourced and because the transgenic mouse (and wild type mice) did not contain any viruses or hazardous agents, this incident was not reportable to NIH. EHS reviewed with the researcher good lab practices related to sharps safety and discouraged the re-use of needles. Both literature explaining the re-use of needles and the sharps safety training in BioRAFT were forwarded for review and completion as a refresher to best prevent recurrence.
BUMC	11/5/19	Left index finger and thumb lacerations	BSL2		A PI called ROHP today 11/6/19 at 10:45 am to report a Master's student sustained a couple of lacerations yesterday (11/5/19) at about 5:00 pm while working on a thesis project in a BSL2 lab. The student was wearing one pair of gloves, a lab coat, face mask and goggles while holding a scalpel in in his right hand and a buccal swab with his left fingers when he accidentally cut his left index and thumb fingers with the scalpel.	Yes		BPHC	This incident was attributed to lack of awareness and understanding of the procedure. EHS retrained the student in handling the scalpel and using techniques to cut the buccal swab while keeping hands away from the blade.
BUMC	11/8/19	Right index finger laceration	BSL2		On 11/8/19, an undergraduate researcher (a senior at BU), presented at ROHP as a walk-in after sustaining a small cut on her right index finger in the lab today through her single gloved hand. She had been using a microtome with a fresh disposable blade, cutting 1) fixed embryonic mouse tissue, and then 2) PFA fixed human tissue. At that time, some fixed human tissue stuck to the blade, and she was in the process of removing the fragile slice of tissue using a brush and forceps when her finger got too close to the blade. She sustained a small cut which bled. She rinsed it with water, and notified two employees in the lab, who walked the student over to ROHP for evaluation.	No		N/A	This incident was attributed to not being conscientious. The student was counseled to be more exact in finger placement while using the instrument. The current EHS Microtome Safety Guidelines are posted by the machine and were referenced in the interview. They were also sent the link and asked to complete the Sharps Safety Training on BioRAFT.
BUMC	11/21/19	Report of skin irritation - possible chemical exposure	ABSL2		An animal care technician was seen in ROHP 11/21/19 reporting itching and red hives on his right wrist that started 11/21/19 at 10:45 am. While wearing personal eye glasses, a lab coat, gloves and mask, he reports he accidentally sprayed his left wrist with Peroxigard Concentrate (4.24% hydrogen peroxide) 11/18 or 11/19/19, noticed an itch which resolved after washing up.	No		N/A	This incident is being followed up.
BUMC	11/27/19	Mouse bite to right index finger	ABSL1		A vet tech for the animal science center walked into ROHP at 12: noon today reporting she was bitten on her right index finger about ten minutes prior at 11:50 am. She was wearing one pair of nitrile gloves, lab coat, shoe covers and her own glasses when she picked the mouse up by its tail, the mouse turned and bit her. She washed immediately with soap and water and was further evaluated and provided first aide treatment in ROHP.	Yes		BPHC	This incident was attributed to not being conscientious. EHS conducted a follow up with the technician. In summary, the mouse was clean and did not harbor any pathogens or hazardous agents. The technician has been breeding rodents for two years at BU and this was the first time they had experienced an incident. PPE was appropriate and all trainings are up to date.
BUMC	12/4/19	Rat bite to right thumb	ABSL1		A post doc student was escorted to ROHP by his supervisor at 3:20 pm to report the student sustained a rat bite to the right thumb at 3pm. The student while wearing double gloves, sleeve covers, facial protection and lab coat was restraining a Sprague-Dawley rat that was about to receive an injection of xylazine and ketamine by the PI when the rat turned and bit the student's right thumb. The wounds were washed immediately with soap and water for at least 10 minutes and again in ROHP.	Yes		BPHC	EHS met with the PI and student, who confirmed the rat was from a ABSL1 laboratory, was non transgenic and did not contain any hazardous agents. The student is up to date with all the required trainings and is experienced with restraint techniques. In the future, all lab members will wear an additional pair of heavy duty reinforced gloves in between the 2 layers of nitrile gloves when handling the rats.
BUMC	12/6/19	Abrasion to left arm	ABSL1		On 12/6/19, an animal care technician came to ROHP for evaluation of a scrape to his left arm. He was moving supplies from one building to another when he attempted to go through a double-door doorway. He found the door on the right locked in place, so he had to pass through the left side of the door, which he was able to open. Because the doorway was therefore narrowed, he walked backwards, pulling the cart behind him. As he passed through the doorway, he scraped his left forearm (through his clothing) on the door that was locked in place.	No		N/A	This incident is being followed up.

Charles River Campus (CRC)									
CRC	10/23/19	Needle stick to left index finger	N/A		A laboratory supervisor called to report a student accidentally stuck her left index finger with a needle that contained <1ml of Ether. The student washed the wound for 15 minutes with soap and water and called our office back after decontamination.	No		N/A	This incident was attributed to missing equipment. EHS advised student to always remember to clamp her glassware or otherwise place it in the proper holder to prevent spills. EHS requested that student take BioRaft sharps safety training.
CRC	11/6/19	Splash to eyes	BSL2		At 5:55 pm on 11/6/19, a dental student working with 25% glutaraldehyde sustained a splash to both eyes. While she irrigated her eyes using the eye wash, a dental student colleague called the ROHP after hours hotline, and the on-call physician returned the call within a few minutes. The physician advised that she complete the eye irrigation and then go to the BMC ER for evaluation and treatment. The dental student irrigated her eyes for 15 minutes and was escorted to the ER by her colleague. She spent 3 hours in the ER, with evaluation and treatment by the attending MD (not by Ophthalmology). Upon discharge from the ER, she was given 3 prescriptions for eye medications (eye drops). Because she left the ER after 9:00 pm, she was unable to fill the prescriptions at that time.	No		N/A	This incident was attributed to lack of personal protective equipment. EHS met with the researcher, PI and other lab mates to discuss the incident. The researcher conveyed she received a chemical splash to the right eye only. Appropriate measures were taken to irrigate the affected area and seek medical treatment with escorted assistance. The lab tests the eyewash with a weekly inspection. However, the researcher was not wearing any safety eye protection at the time of the incident. EHS advised lab members to DON chemical splash goggles when manipulating chemicals to prevent potential splash and/or exposure.
CRC	11/13/19	Systemic symptoms after chemical spill	N/A		ROHP received a phone call from a laboratory supervisor employee at 12:50 pm calling from her home reporting she had a sore throat and "off stomach" with a feeling of dizziness, clamminess and lightheadedness after a couple chemicals spilled in her lab. She reports the spill happened at about 11:00 am and she experienced symptoms at about 11:20 am.	No		N/A	This incident was attributed to a house keeping issue. EHS met with the laboratory supervisor the following day, after she returned to work. She said that her work study student had bumped into a cart that contained toluene and chlorobenzene and the bottles had tipped over unnoticed when the cart was jostled. There was an approximately 50mL puddle of solvents from where the dispensing pumps had leaked. Going forward, the bottles will be capped and placed in secondary containment bins. The dispensing pumps will only be in place during use.
CRC	11/16/19	Custodian reporting needle stick	N/A		The on call physician received a phone call 11/16/19 at 10:30 pm from a custodian and his supervisor regarding a report of a needle stick. The on call physician reported that the custodian stated he was cleaning in a BU dorm when he felt prick into his knee. Looking thru garbage he found a Humira pen with needle retracted. He did not see blood but serous secretion in area. Cleaned with antiseptic. Sent to the Emergency Department where direct risk assessment occurred. Employee will be followed by the BU Occupational Health Center on the Charles River Campus.	Yes		BPHC	This incident is being followed up.
CRC	12/11/19	Splash of 20% methanol to lip	BSL2		A PhD student called ROHP at 1:25 pm to report he accidentally sustained a couple of drops of 20% methanol to his lower lip. He was wearing a lab coat, goggles and gloves when he accidentally felt a couple of drops of liquid as was preparing a western blot using 20% methanol, 10% buffer and 70% water solution. He denied exposure to eyes. He denied any pain, burning sensation or any other complaints. He washed his face immediately with water and was encouraged to irrigate for at least 15 minutes.	No			This incident was attributed to lack of awareness/understanding of procedure. With EHS follow up the student confirmed no biologics were involved with this incident. He washed his face immediately with water and was encouraged to irrigate for at least 15 minutes. EHS advised to wear a face shield instead of goggles for this lab person.
<b>National Emerging Infectious Disease Laboratory (NEIDL)</b>									
NEIDL	11/20/19	Allergic reaction to nitrile gloves	BSL2		2nd year PhD student who reported an allergic reaction to nitrile gloves. Beginning in September, she noticed some itching of her hands when wearing nitrile gloves but did not consider it noteworthy. Then, on 11/20/19, the itching became "profound and unbearable" and she noticed a rash on her hands and swelling of the dorsal hands. She removed the gloves and someone else from the lab took over her experiment while she washed her hands with soap and water. She then used anti-histamines for several days to control the itching. Several days later, she informed her PI, who advised her to contact ROHP. She was busy at the time, but did contact ROHP two weeks later. Fortunately the reaction to nitrile gloves was localized, with no hives, shortness of breath, or swelling in the mouth or throat. The lab ordered latex gloves for her and she has not experienced any adverse effects from the latex gloves.	No			EH&S met with the PI to discuss the type of work the student performs and the process for selecting appropriate PPE. The student will no longer wear nitrile gloves. The PI and EH&S will work together to determine the most appropriate glove material for the student to use based on the physical and chemical hazards involved with the tasks.
NEIDL	11/22/19	Drop of liquid (bacteria with buffer) BSL2 to left eye	BSL2		ROHP received a telephone call at 1:00 pm from a research assistant reporting she sustained a drop of liquid to her left eye at noon as she tried to open the cap of a 1.5ml tube containing a bacteria (she is not sure which bacteria) with buffer to set up a mini prep. She denied having any pain or vision changes. She reports she did not call ROHP right away as she was in a rush to attend a PhD dissertation. She reports she disposed of her contact around 12:45 pm.	No			The incident was attributed to lack of personal protective equipment. Going forward, the researcher will utilize eye protection for this procedure, will utilize a local eyewash station in the event of an eye exposure and will contact ROHP as soon as possible following the exposure.
NEIDL	12/4/19	Potential chemical exposure	BSL2		A graduate student reported to ROHP on Thurs. Dec. 5th that he noticed a couple of dots on his right middle finger and left middle, ring finger pads and right 5th finger knuckle after wiping up <1gm spill of "crystal violet powder" that he sprayed with alcohol and wiped up with towels and cleaned off the floor with a steel wool pad while working on a bench in a BSL2 lab. The researcher had double gloves, a lab coat and closed toed shoes when he accidentally spilled <1gm of "crystal violet powder". He denied any known breach in gloves and washed his hands immediately with soap and water multiple times.	No			The incident was attributed to an inadequate procedure. EHS met with the student and advised moving forward, the transfer of crystal violet powder into solution should be performed using secondary containment to contain any spilled material. Any spilled material can then be diluted and collected in a hazardous waste container. Alternatively, this activity can be eliminated by purchasing prediluted crystal violet solutions from a chemical manufacturer.

Other - Collaborating Laboratory		No incidents							

\* Indicates if incident is reportable to local, state or federal agency (e.g. Centers for Disease Control, National Institutes of Health, Boston Public Health Commission, etc.)

\*\* Campus Location

**BUMC** - Boston University Medical Center

**CRC** - Charles River Campus

**NEIDL** - National Emerging Infectious Disease Laboratories

**Other** - work done at collaborating laboratories