

BU Agent Incident Reporting Summary July to September 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	7/2/19	Cut to left middle finger	ABSL1		A lab safety manager called ROHP at 1:25 pm to report an undergraduate student cut his left middle finger with a razor blade while working with a mouse model not treated with any hazardous agents.	No	No	N/A	The undergraduate was inadvertently cut with a razor blade prior to shaving the OCT from a mouse brain. The sharps was not contaminated with pathogens or hazardous agents. EHS discussed with the researcher sharps safety practices. The incident was attributed to lack of personal protective equipment. To prevent recurrence in the future, cut resistant gloves will be made available by the lab and utilized when handling blades for the operation of the cryostat.
BUMC	7/15/19	Needle stick to middle of right palm	BSL2		A research fellow called ROHP 7/15/19 at 5:00 pm and spoke with the on call physician who reported: Employee states that this afternoon at 2:30 pm she was removing bone marrow cells from mouse femur and tibia. She says they insert a catheter into marrow to "floss the marrow". The catheter got stuck and as she was trying to adjust it, it came out and struck her in the middle of her right palm.	Yes	No	BPHC	The incident was attributed to not being conscientious. EHS reviewed good lab practices and sharps safety techniques with the researcher and recommended that the researcher complete the Sharps Safety Training module in the BioRAFT system. This incident was reported to NIH, though the gene being over-expressed should not pose hazardous to humans.
BUMC	7/23/19	Needle stick after use on mouse with cancer cells	ABSL2		A research associate working for a BU affiliated company walked into our clinic at 12:30 pm reporting she sustained needle stick at about 11:30 am. She was wearing two pairs of gloves, two pairs of booties, lab coat, sleeve covers, face mask, and hair net- working in a hood.	Yes	No	BPHC	The needlestick injury occurred when the researcher was disposing the needle containing a small molecule "anti-metastatic drug." It was not associated with genetically modified material or organisms and therefore was not reportable to NIH. The incident was attributed to not being conscientious. EHS reviewed good lab practices and sharps safety techniques with the researcher and recommended the researcher complete the Sharps Safety Training module in the BioRAFT system.
BUMC	7/24/19	Bite wounds to right index finger	ABSL1		An undergraduate student volunteer was escorted to ROHP by his supervisor as the student reports he sustained a couple of bite wounds from a rat bite at 12:45 pm today.	Yes	No	BPHC	The incident was attributed to the individual not being appropriately trained. The PI confirmed there were no pathogens or hazardous agents involved with this rat. EHS recommended that all new lab members receive proper trainings by the PI/supervisors before handling animals independently and emphasized on-line training modules in BioRAFT get completed prior to conducting laboratory work.
BUMC	8/6/19	Left thumb laceraton	BSL2		A right hand dominant undergraduate student was escorted to ROHP by her lab manager, reporting she had just cut her left thumb with a razor blade at about 3:45 pm.	No	No	N/A	EHS confirmed the razor blade was new and did not harbor any pathogens or hazardous agents. The incident was attributed to not being conscientious. The student was referred to BMC emergency room for further evaluation. EHS recommended the researcher complete the Sharps Safety Training module in BioRAFT and advised not to rush or be distracted while performing such experiments in the future.
BUMC	8/14/19	Percutaneous injury to right 5th finger with needle contaminated with S. aureus	BSL2		At 8:00 am today, a 3d year PhD student presented at ROHP as a walk in, reporting a needle stick injury at the end of the day on 8/14/19. The needle was contaminated with S. aureus. The incident occurred while injecting a mouse with S. aureus.	Yes	No	BPHC	The PI confirmed that the S. aureus strain involved in the incident was a clinical isolate with no antibiotic resistance (Rosenbach strain) and the strain is available through commercial sources such as ATCC (#25923). Since the researcher was not using genetically modified material or organisms, this incident is not reportable to NIH. The incident was attributed to rushing the experiment. She has performed this task routinely over the last year at BU and is proficiently skilled. The researcher suggested she would be more mindful in the future.
BUMC	9/11/19	Nasal contusion	BSL2		A technician for the BU Goldman dental school walked in for evaluation of her nose. She reports at approximately 11:40 am she went to grab a pair of gloves when she turned and accidentally hit the cone of the panoramic machine with her nose while wearing her eye glasses.	No	No	N/A	N/A

BUMC	9/12/19	Contusion and abrasion to left hand	ABSL1		An Animal Care Technician working on the BUMC sustained a contusion and abrasions to the back of his left hand while transporting BUASC supplies through a doorway (leading to an elevator alcove) on the first floor of the 700 Albany Street building.	No	No	N/A	N/A
Charles River Campus (CRC)									
CRC	7/22/19	Two students bitten by same mouse	ABSL1		ROHP received an email from a supervisor 7/23/19 that two students in his lab were bitten by "a particularly difficult mouse" on 7/22/19. The bite wounds were washed thoroughly and incident reports were submitted on line.	Yes	No	BPHC	Both students reported that they were new to the lab and inexperienced with handling rodents. EHS advised that both students follow up to complete additional animal handling training.
CRC	7/28/19	Mouse bite to left outer thumb	ABSL1		An animal care technician was bitten by an ABSL1 mouse. The bite was superficial and was washed immediately. The supervisor notified ROHP by email and submitted an incident report on line. No biologics or viruses were involved with this mouse.	Yes	No	BPHC	EHS confirmed the mouse was clean and did not harbor any pathogens or hazardous agents. The animal care technician is inexperienced and new to Boston University. EHS advised additional animal handling training to acquire sufficient skills and expertise prior to performing animal related tasks independently.
CRC	7/28/19	Needle stick to right thumb with chemicals	N/A		ROHP received an email today that an incident report was submitted on line for a researcher who sustained a needle stick to the right thumb, yesterday 7/28/19 at 12:30 pm.	No	No	N/A	The needlestick injury occurred when preparing the syringe with 3-aminopropyl triethoxysilane (APTES). This incident was attributed to not being conscientious. EHS reviewed good lab practices and sharps safety techniques with the researcher and recommended that the researcher complete the Sharps Safety Training module in the BioRAFT system.
CRC	8/19/19	Report of bloody stools and back pain 6 days after working with Carbon Tetrachloride	N/A		ROHP received a phone call from a supervisor at about 12:30 pm that a PhD student reported she was experiencing bloody stools and back pain that started this morning. The student reports she was concerned that her symptoms may be related to having worked with "Carbon Tetrachloride" last week.	No	No	N/A	Upon retesting the fume hood, EHS confirmed the hood had adequate exhaust flow and follow up medical screening determined this incident was a non-chemical exposure.
CRC	8/26/19	Concern of potential bloodborne pathogen exposure	BSL2		Plastic tube of frozen cells shattered with splash to face.	Yes	No	BPHC	When EHS arrived on scene the employee had just finished irrigating his eyes at the emergency eyewash station. The employee, along with his coworker, were transferring tubes that contained 250-500 µL of blood samples (PBMC) from a cryogenic shipping container to a box prior to placing it into a lab freezer when the tube exploded. BU police were already on scene and had called EMTs. They arrived 5 minutes of EHS arrival and transported the employee to Beth Israel Hospital. On further investigation, this particular vial of sample was sourced from a participant in an anti-retroviral treatment study since 2013 and is 100% adherent to the treatment. This participant has undetectable levels of infection (virus-free from a transmission standpoint). EHS decontaminated the rooms in the areas where the incident took place with a hydrogen peroxide solution, while the lab manager decontaminated the floor with a 10% bleach solution. A conference call was convened next day which was attended by PI and her staff, faculty and staff from department and EHS. The participants evaluated the incidence and discussed the possible cause, potential risk and ways to prevent it from happening in the future. It was decided that EHS will train and help lab develop a SOP for receiving and transferring cryovials from one liquid nitrogen container to another container. The incident was attributed to broken, defective equipment.

CRC	9/5/19	Transgenic mouse bite to left small finger	ABSL2		At 9:00 am on 9/5/19 an animal care technician sustained a BSL2 mouse bite while working with a transgenic mouse in the BUASC. The injury was reported to the supervisor, who filed an accident report. Later, ROHP learned more about the incident from a BUASC manager.	Yes	No	BPHC	Because the transgenic mouse (PV-Cre) did not contain any viruses or hazardous agents, this incident was not reportable to NIH. The animal care technician had insufficient skills and expertise. The BUASC manager reported that after the mouse was removed from the cage and handled twice, the mouse may have become agitated and was more likely to bite. The BUASC supervisor discussed different mouse behaviors, what to observe and considerations not to disturb. The animal care technician is fairly new to BU and confirmed she will be completing additional training and re-training related to mouse handling with the BUASC trainer.
CRC	9/11/19	5% Sodium Hydroxide spill to gloved left index finger	N/A		A lab supervisor called ROHP at 2:30 pm to report that an undergraduate student while wearing gloves and lab coat and working under a fume hood accidentally spilled (a few ml) of 5% sodium hydroxide on her gloved left index finger.	No	No	N/A	The incident was attributed to insufficient skills and expertise. The undergraduate student was manipulating a poorly clamped separatory funnel when it tipped and spilled 5% sodium hydroxide on her gloved hand. Student changed gloves immediately and noticed a "burning" sensation about 2 minutes later and further irrigated the affected area as a precaution. EHS advised the student to check clamps for stability in the future, before manipulating glassware containing chemicals and recommended the use of ring clamps as an alternative to assist in supporting the equipment.
CRC	9/13/19	Inhalation exposure to TBME in organic chemistry teaching lab	N/A		At 3:15 pm today, an undergraduate student in the organic chemistry teaching lab on the CRC called to report mild throat and ear irritation after working with "TBME" (tert-butyl methyl ether) under a hood from 12:50 pm to 3:15 pm today.	No	No	N/A	In discussion with EHS, the student reported that she may have spilled 1mL of tert-butyl methyl ether while operating inside a fume hood. EHS reviewed the SDS and noted the chemical was a highly flammable liquid and vapour and causes skin irritation. EHS reviewed with the student best practices for operating a fume hood and emphasized that the hood sash should always be kept at the certified height, as marked on the equipment. Also, it was advised to move the waste container inside the fume hood while pouring waste into it. Upon retesting the fume hood, EHS confirmed the hood had adequate exhaust flow.
CRC	9/13/19	Cut to right wrist	N/A		ROHP received an email that an undergraduate student sustained a cut on their wrist while in a chemistry teaching lab 9/13/19.	No	No	N/A	The incident was attributed to a house keeping issue. The student reported that as she leaned her hand on the laboratory bench top, she was accidentally cut on the wrist with a piece of broken glass. She irrigated the affected area, bandaged the wound and followed up with ROHP. EHS recommended that teaching fellows ensure lab benches maintain cleanliness on a regular basis to prevent occurrences in the future.
CRC	9/18/19	Clean needle stick injury to left thumb	N/A		A teaching fellow called ROHP at 2:40 pm to report that an undergraduate student in the organic teaching lab sustained a clean needle stick injury to the left thumb.	No	No	N/A	EHS confirmed with the student that the injury involved a clean needlestick and there were no pathogens or hazardous agents involved. The injury occurred while she was preparing the syringe. EHS reviewed good lab practices and sharps safety techniques with the student and recommended that the student complete the Sharps Safety Training module in the BioRAFT system.
CRC	9/18/19	Laceration to left small finger	N/A		Around 8:00 pm on 9/18/19, an undergraduate student had a minor injury in a chemistry teaching lab. The student was wearing one pair of gloves as he attempted to remove a glass lid from a desiccator. The lid broke as he did this, and as it broke it cut through his glove and caused a shallow, 2-3 mm laceration on his left pinky finger. He was not exposed to any biological or chemical agents at the time of the injury.	No	No	N/A	EHS followed up with the student. The student reported that he was trying to open a dessicator with his left hand while holding another object in his right hand. He said the lid was oily and his glove was slippery with other liquid when the lid slipped out of his hand and broke. He sustained a laceration on his left finger, washed the affected area with soap and water and followed up with ROHP. To prevent recurrence in the future, EHS suggested to wipe the top of the dessicator with paper towel to remove oil, change gloves before opening glass lid and use two hands at all times.

CRC	9/20/19	Headache and nausea after working with Hexane	N/A		An undergraduate student in a chemistry teaching lab called ROHP Saturday 9/21/19 at 9:15 am to report she was instructed to call ROHP as she noticed a headache after working in a lab for 3 hours with a Hexene solution.	No	No	N/A	The student reported that she was working with hexane in a dropper outside of the fume hood. With these small amounts, she believes the headache may have been caused by leaning over the experiment. The incident was attributed to an equipment related issue, and EHS advised the lab to install additional fume hoods for use. EHS counseled the student to work in a fume hood as much as possible, avoid leaning over work when using chemicals, especially solvents, and vacate the lab when there is a feeling of discomfort and follow up with appropriate phone calls to EHS.
CRC	9/26/19	Laceration to right index finger	N/A		At 1:50 pm today, an undergraduate student in an organic chemistry teaching lab sustained a minor laceration to her right index finger while handling a 50 ml beaker which had a sharp edge on its spout. The beaker was clean, with no exposure to chemicals or biological agents. The student had been wearing one pair of gloves. No foreign body was in the wound.	No	No	N/A	The student reported that at the time of the incident she was washing a beaker by swirling soapy water in it and did not notice a chip on the spout, which cut her finger. The incident was attributed to a housekeeping issue. EHS advised that all glassware be examined for breakage prior use and when any breakage is identified have the damaged glassware removed promptly.
CRC	9/26/19	Mouse bite to left 5th finger	ABSL2		An NP at BUOHC called ROHP today to report a faxed report of an injury that had occurred about an hour earlier. At that time, ROHP called and spoke to the supervisor and the injured employee on the phone. At 1:45 pm today, an Animal Care Technician was working in a BSL2 setting on the CRC at 590 Comm. Ave, room 425C, when she observed some mice fighting. She waited briefly until they stopped fighting, then reached into the cage to examine one of the mice for injuries. Her left hand was single gloved and her right hand was double gloved. She grasped the mouse's tail with her left hand and in doing so, curled her 2nd to 5th fingers toward her palm. When doing so, she accidentally and momentarily wrapped her pinky finger around the face of a bystander mouse, and that mouse bit her left 5th finger.	Yes	No	BPHC	In summary, she had observed some mice fighting, waited briefly until they stopped, then reached into the cage to examine one of the mice for injuries and sustained a mouse bite on her left pinky finger. She immediately washed the affected area and reported the incident to her supervisor. EHS met with the Director of BUASC, BUASC trainer and BUASC operational manager. The animal care technician was working with a commercially available mouse strain C57bl/6j that is not transgenic. The mice in that cage were injected with AAV and rAAV (BLS1 agents) into the brain to deliver genes to neurons. These genes do not code for any oncogenes and should not pose harm to humans. This incident was reported to NIH and was attributed to not being conscientious. She completed additional training and re-training related to mouse handling with the BUASC trainer. To prevent recurrence in the future, she will wear special reinforced nitrile gloves that are heavy duty and disposable when handling mice. She was also counseled on using inanimate objects, such as forceps, to manipulate the mice and be mindful to conscientiously keep hands away.
CRC	9/27/19	Clean needle stick injury to left middle finger	BSL2		A third year graduate student called at 2:15 pm to report a minor injury in the lab at 10:00 am today. He was holding a clean needle and syringe and as he uncapped the needle, he stuck himself near the tip of his left middle finger. He had been wearing a single pair of nitrile gloves at the time and the needle went through the glove and penetrated the skin. He washed the wound and notified his PI, who asked him to report the injury to ROHP.	No	No	N/A	This incident was attributed to not being conscientious. The student accidentally sustained a clean needlestick (no pathogens or hazardous agents) while uncapping the needle. He reported that he has used needles and syringes many times before and believes that this incident was caused by applying too much force when trying to remove the needle cap because it was so tightly secured on there. EHS recommended he complete the Sharps Safety Training module in the BioRAFT system.

CRC	9/30/19	Facial irritation while working with hydrogen peroxide	N/A		ROHP received an email this morning from a lab teaching fellow that a student in a chemistry teaching lab reported she had a small section of her chin/ cheek that felt irritated when performing the 3rd lab of the semester working with reduction / oxidation titrations of hydrogen peroxide yesterday 9/30/19.	No	No	N/A	The incident was attributed to poor contamination control and not being conscientious. EHS received a written incident report from undergraduate student's teaching fellow stating that student reported irritation on her chin/cheek while working with hydrogen peroxide in freshman chemistry lab. The student also reported in a follow up with EHS that she suspects the irritation was caused by transferring acid residue to her cheek from her gloves due to absentmindedly touching her face. She did not notice any splashes or gross glove contamination until she felt the burning on her face and irrigated the affected area with soap and water. EHS advised student on maintaining proper glove hygiene and avoid touching face with gloved hands.
National Emerging Infectious Disease Laboratory (NEIDL)		No incidents							
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)

** Campus Location

BUMC - Boston University Medical Center

CRC - Charles River Campus

NEIDL - National Emerging Infectious Disease Laboratories

Other - work done at collaborating laboratories