Lessons Learned & Success Stories – September to November 2015 Report

The NBACC Lessons Learned and Success Stories Summary serves to reinforce a strong culture of safety and accountability by promoting consistent reporting of mishaps, establishing strong lines of communication with the safety department, supporting a learning environment by allowing others to learn from reported events, and tangibly demonstrating NBACC Leadership's commitment to safety, accident prevention, and continuous improvement.

SUCCESS STORIES:

1. A BNBI employee noticed a dolly on the floor in the walkway next to the maintenance elevators on 2i and identified it as a potential trip hazard. They moved the dolly and set it on its side against the wall and notified Safety of the issue. Safety talked to the contractors and reminded them to keep dollies and other potential trip hazards out of the walkways.
2. Prior to entering an airlock, a staff member noticed ice packs on the floor and was uncertain if it was safe to enter. They contacted the responsible laboratory staff and it was confirmed the air lock was safe to enter.
3. While eating lunch, a staff member noticed that a coworker suddenly got extremely hot and very flush and appeared to be feeling very uncomfortable as if they were having an allergic reaction to what they had been eating. The staff member insisted that the coworker go to the CMA for evaluation and if they didn't go they would call themselves. After this insisting, the coworker visited the CMA for evaluation.
4. A BNBI employee noticed that there were no signs informing staff of the need to don "closed toed shoes" prior to entering the first and third hallway (from the entrances on stair 2). They noticed the lack of signs after they caught themselves in the wrong type of shoe while entering those corridors from stair 2. New signed were posted.
5. A BNBI employee used their PPE and respiratory protection training from NBACC at home. As a result, they implemented use of gloves and masks when doing house projects such as cleaning with hazardous chemicals and sanding and painting walls.
6. A BNBI employee bought a package of cream cheese and noticed it was past the expiration date. They called the store to alert them to take the expired merchandise off of their shelves.
7. Two technical staff members were in the BSL-3 suite and were going to autoclave trash in the hallway. When the "non-liquid" trash lid was removed, they found a pair of jeans and tee shirt just lying in the orange bag. Since this was an unusual situation, the LSM was called for additional information. The LSM contacted safety and was informed by the Health & Safety Manager that the clothes were from a planned activity.
8. A BNBI employee was canning spaghetti sauce with their family and set up some safety procedures before they started using a motorized food mill. When adding boiling hot tomatoes, peppers and onions, there was a chance of the boiling water splashing if you add too quickly. The employee made sure the person running the food mill was wearing heavy pants, a heavy shirt and work boots to protect them in case of a splash or spill. There were no incidents.

9. A BNBI employee noticed a new hire using scissors for a cutting task that was more suitable for a knife. The employee requested several “Klever Kutter” safe cutting tools from the Health and Safety Office and distributed them to her group as a way to prevent lacerations. This demonstrates an effort by the employee to train a new hire in the culture of accident prevention.
10. During a “safety share” meeting at NBACC, a group gave two suggestions to improve the safety of staff using the stairwells:
    a. Monitor the level of the abrasive treads in the metal tracks on the stairs.
    b. Paint the handrail of the stairs a contrasting color (other than red)

LESSONS LEARNED:

1. The CMA is an integral part of NBACC operations and provides support to staff in a variety of ways ranging from administering standard first aid or emergency medical care, and conducting evaluations of events for potential exposures. The CMA is available on site during normal NBACC operating hours and staff should never hesitate to reach out for support.

2. Staff members should remember that everyone needs to “own” safety. If you see something that you know isn’t right, take the time to get the issue fixed. The simple act of wiping up a coffee spill (even if you were not the one that spilled it) or moving a misplaced dolly could prevent a serious injury to your co-worker (slips, trips, and falls are the leading cause of work place injuries).
3. Finger cuts continue to be the top event occurring at NBACC. While most of these “cuts” would rate little more than a shoulder shrug (and possibly a Band-Aid) at most work locations, as most of you know, NBACC takes a much more conservative approach to overall safety. There are high hazards present so we take a very conservative approach to monitoring and managing even the simplest of near misses. While we don’t want to lose sight of the big picture, we believe that solving/preventing little issues can go a long way towards preventing the big ones. Some things to consider for minimizing the risk of a finger cut that also prevent bigger issues:
    a. Always use the right tool (i.e. using clippers instead of a knife)
    b. Always consider a safer approach to a task (i.e. using a safety cutter instead of an open blade)
    c. Always use the correct PPE (i.e. wearing cut resistant gloves).
4. Yes, you can make a difference. The lessons learned communicated in the October report discussed the use of proper tools as a way to reduce the potential for a hand injury. Looking at the November success stories indicates that someone used this information and played it forward when they recommended the use of a Klever Kutter to another staff member. While there were still numerous finger injuries in November, continued focus on safety in general and lessons learned in particular, remains our best opportunity for reducing these types of injuries.

EVENT SUMMARIES:

1. **FIRST AID SUMMARY:** 08/04/2015; A BNBI employee strained their back while pulling a heavy bag of waste from an autoclave. The CMA examined the employee and they were not restricted from work as result of the injury.
2. **FIRST AID SUMMARY:** 08/19/2015; A BNBI employee cut their foot while opening the door to the offices. The CMA examined the employee and they were not restricted from work as result of the injury.
3. **FIRST AID SUMMARY:** 08/25/2015; A BNBI employee cut their hand on the metal edge of a trash dumpster. The CMA examined the employee and they were not restricted from work as result of the injury.

4. **<u>FIRST AID SUMMARY</u>:** 08/26/2015; A BNBI employee slipped and fell on a wet floor in a laboratory hallway. The CMA examined the employee and they were not restricted from work as result of the injury.
5. **<u>FIRST AID SUMMARY</u>:** 08/28/2015; A BNBI employee slipped and fell on a wet floor in a laboratory hallway. The CMA examined the employee and they were not restricted from work as result of the injury.
6. **<u>OSHA INJURY SUMMARY</u>:** 09/03/2015; A BNBI employee cut their hand while picking up a cardboard box. The CMA examined the employee and applied a type of liquid suture to the wound. The employee was not restricted from work as result of the injury.
7. **<u>FIRST AID SUMMARY</u>:** 09/08/2015; A BNBI employee scraped their knuckles when their hand was pinched between a fridge handle and a door hinge in a BSL-2 lab. The CMA examined the employee and they were not restricted from work as result of the injury.
8. **<u>FIRST AID SUMMARY</u>:** 09/11/2015; A BNBI employee experienced a paper cut in an office area. The CMA examined the employee and they were not restricted from work as result of the injury.
9. **<u>FIRST AID SUMMARY</u>:** 09/11/2015; A BNBI employee cut their finger on a piece of aluminum foil in the atrium while preparing a catered meal for the staff. The employee applied first aid.
10. **<u>FIRST AID SUMMARY</u>:** 09/15/2015; A BNBI employee cut their finger in an office when they hit their hand on their desk. The employee applied first aid.
11. **<u>FIRST AID SUMMARY</u>:** 09/29/2015; A BNBI employee scraped their arm on an exposed nail while uncrating a piece of furniture in an industrial area. The CMA examined the employee and they were not restricted from work as result of the injury.
12. **<u>OSHA INJURY SUMMARY</u>:** 09/30/2015; A BNBI employee cut their foot when they struck the bolt hinge of a paper cutter that had been left on the floor. The CMA examined the employee and sutured the wound. The employee was not restricted from work as result of the injury.
13. **<u>FIRST AID SUMMARY</u>:** 10/8/2015; A BNBI employee noticed a scrape on the top of their finger after they had removed their gloves inside a BSL-4 cabinet lab. The CMA examined the employee and determined that it was not a potential exposure because both gloves were intact. The employee was not restricted from work as result of the injury.
14. **<u>FIRST AID SUMMARY</u>:** 10/09/2015; A BNBI employee experienced a laceration after a blister opened on their thumb while working in a BSL-2 lab. The blister developed as a result of opening approximately 600 microfuge tubes. The CMA examined the employee and they were not restricted from work as result of the injury.
15. **<u>OSHA RECORDABLE INJURY SUMMARY</u>:** 10/21/2015; A BNBI employee lacerated their hand while using a knife to cut cable ties in an industrial area. The CMA applied sutures to the wound.
16. **<u>OSHA RECORDABLE INJURY SUMMARY</u>:** 10/22/2015; The CMA reported that a 2015 audiogram of a BNBI employee indicated a noise induced permanent threshold shift (PTS). The employee was retrained on the need to don hearing protection devices in posted areas
17. **<u>FIRST AID SUMMARY</u>:** 10/28/2015; A BNBI employee developed a blister on their hand that was caused by the repeated motion of chest compressions used during CPR/First Aid training. The employee applied first aid, and reported to the CMA when the blister opened.
18. **<u>FIRST AID SUMMARY</u>:** 10/29/2015; A BNBI employee cut their finger on the edge of a phone locker in the NBACC lobby. The employee applied first aid.
19. **<u>FIRST AID SUMMARY</u>:** 10/30/2015; A BNBI employee experienced a paper cut in a BSL-2 room while putting tape on a container. The CMA examined the employee and determined that it was not a potential exposure.

NEAR MISS SUMMARIES:

1. **SECURITY FAILURE SUMMARY:** 08/04/2015; An escorted visitor exited the men's BSL-3 change room prior to their escort exiting, who was still in the women's change room. The escorted visitor remained in the corridor and an NBACC staff member stopped to question them. The Facility Security Officer was notified and the staff member stayed with the visitor until the escort came out of the women's change room. Security processes are being revised such that any staff needing to escort a member of the opposite sex out of a change room must have someone waiting in the hallway as a backup in case the escorted visitor exits the change room unexpectedly.
2. **FACILITY PROCESS FAILURE SUMMARY:** 08/04/2015**;** A BNBI employee reported that a Class II type B2 BSC went into alarm during a work procedure. The employee reported that the visual indicator on the sash blew out into the room for a moment. The employee was in RPE at the time. The incident was reported to the RO**.** The CMA determined that it was not a potential exposure.
3. **PPE FAILURE SUMMARY:** 08/06/2015; A BNBI subcontractor reported that they tore their outer glove (nitrile) while installing equipment. The inner glove was intact. The CMA determined that it was not a potential exposure.
4. **PPE FAILURE SUMMARY:** 08/06/2015; A BNBI subcontractor reported that they tore their outer glove (nitrile) while installing equipment. The inner glove was intact. The CMA determined that it was not a potential exposure.
5. **PPE FAILURE SUMMARY:** 08/06/2015; A BNBI employee reported that they tore their outer glove (nitrile) while working in an anaerobic chamber. The inner glove was intact. The CMA determined that it was not a potential exposure.
6. **FACILITY PROCESS FAILURE SUMMARY:** 08/06/2015; A BNBI employee reported that they found a toilet that had overflowed in the BSL-3 men's bathroom. FMO is monitoring the issue.
7. **PPE FAILURE SUMMARY:** 08/07/2015; A BNBI employee reported an inner glove tear while working in the BSL-4. The glove tear was discovered while taking off their suit in the suit room. The CMA determined that it was not a potential exposure.
8. **LAB PROCESS FAILURE SUMMARY:** 08/07/2015; A BNBI employee reported that a contaminated sharps container floated to the top of a Class III BSC dunk tank before the 10 minute contact time had elapsed. The container was immediately pushed back down into the dunk tank. The CMA determined that it was not a potential exposure.
9. **PPE FAILURE SUMMARY:** 08/12/2015; A BNBI employee reported that they tore their inner glove (nitrile) while working in a BSC. The CMA determined that it was not a potential exposure.
10. **PPE FAILURE SUMMARY:** 08/13/2015; A BNBI employee reported that they tore their inner glove (nitrile) while working in a BSC. The CMA determined that it was not a potential exposure.
11. **FACILITY PROCESS FAILURE SUMMARY:** 08/13/2015; A BNBI employee reported that a drain overflowed in a BSL-4 airlock. FMO is monitoring the issue.
12. **LAB PROCESS FAILURE SUMMARY:** 08/13/2015; A BNBI employee reported that a small quantity of a chemical spilled out of an instrument. Although the source was not identified, the spill was cleaned up and a larger waste container was placed in the lab.
13. **PPE FAILURE SUMMARY:** 08/18/2015; A BNBI employee reported a suit breach (#108) in the shoulder area. The CMA determined that it was not a potential exposure.

14. **<u>LAB PROCESS FAILURE SUMMARY</u>:** 08/19/2015; A BNBI employee reported that an all glass impinger dropped and broke inside of a Class III BSC. The CMA determined that it was not a potential exposure.
15. **<u>LAB PROCESS FAILURE SUMMARY</u>:** 08/20/2015; A BNBI employee reported that a small quantity of sample (0.5 mL) spilled inside of a Class II BSC.
16. **<u>LAB PROCESS FAILURE SUMMARY</u>:** 08/21/2015; A BNBI employee reported that the door of the lyophilizer in a BSL-3 room was found open. The lyophilizer door was left open in order to allow it to dry after it had been decontaminated. The CMA determined that it was not a potential exposure.
17. **<u>PPE FAILURE SUMMARY:</u>** 08/26/2015; A BNBI employee reported that they tore their inner glove (nitrile) while working in a BSC. The CMA determined that it was not a potential exposure.
18. **<u>PPE FAILURE SUMMARY</u>:** 08/26/2015; A BNBI employee reported a suit breach (#104) in the crotch area. The CMA determined that it was not a potential exposure.
19. **<u>LAB PROCESS FAILURE SUMMARY</u>:** 08/27/2015; A BNBI employee reported that a laptop was placed into an airlock VHP decontamination. The laptop was brought back into containment and autoclaved.
20. **<u>LAB PROCESS FAILURE SUMMARY</u>:** 08/28/2015; A BNBI employee was struck in the finger by the tooth of an anesthetized animal when the animal's head fell forward. There was no laceration and neither inner nor outer glove were compromised. The CMA determined that it was not a potential exposure.
21. **<u>LAB PROCESS FAILURE SUMMARY</u>:** 08/31/2015; The NBACC fire alarm system sounded and the building was evacuated due to dust from an improperly sealed shop vacuum activating a smoke detector. The FD Fire Department responded and the building was cleared for reentry.
22. **<u>LAB PROCESS FAILURE SUMMARY:</u>** 09/01/2015; A BNBI employee reported that a small amount of liquid spilled out of a biohazard bag while it was being moved to the autoclave. The spill was cleaned up with appropriate disinfectant.
23. **<u>FACILITY PROCESS FAILURE SUMMARY</u>:** 09/02/2015; A BNBI employee reported that they found a toilet that had overflowed in the BSL-3 men's bathroom. FMO is monitoring the issue.
24. **<u>FACILITY PROCESS FAILURE SUMMARY</u>:** 09/04/2015; A BNBI employee reported that they found a toilet that had overflowed in the BSL-3 men's bathroom. FMO is monitoring the issue.
25. **<u>LAB PROCESS FAILURE SUMMARY</u>:** 09/11/2015; A BNBI employee reported that they wore a PAPR hood without a PAPR motor attached in order to retrieve a PAPR motor from inside containment because there were no PAPR motors available within the containment side change room. CMA determined that it was not a potential exposure. The individual was re-trained on Respiratory Protection.
26. **<u>SECURITY FAILURE SUMMARY</u>:** 09/16/2015; A BNBI employee reported that a key and key safe were found unsecured in BSL-3 containment. The RO conducted an investigation and it was determined that the key and key safe were not in active use at the time. The key and key safe were secured per the SOP and staff were re-trained on proper procedure.
27. **<u>PPE FAILURE SUMMARY</u>:** 09/18/2015; A BNBI employee reported a BSL-4 suit tear (Sperian #86) while conducting a pre-use pressure decay test. The suit was retired from service.
28. **<u>PPE FAILURE SUMMARY</u>:** 09/23/2015; A BNBI employee reported an outer glove tear (nitrile) while working in the BSL-3. The CMA determined that it was not a potential exposure.
29. **<u>LAB PROCESS FAILURE SUMMARY:</u>** 09/23/2015; A BNBI employee reported that a large number of dilution blanks were not wiped down prior to being brought out of an active BSC, which had only been surface decontaminated. The dilution blanks were then labeled and organized on the benchtop before being returned to the BSC for addition of agent. The tubes were not opened on the benchtop. A CAPA in Reliance was initiated.

30. **LAB PROCESS FAILURE SUMMARY:** 09/23/2015; A BNBI employee discovered and reported a drop of blood from an unknown source in front of elevator #2. The blood was cleaned up and the area disinfected.
31. **PPE FAILURE SUMMARY:** 09/24/2015; A BNBI employee reported a BSL-4 suit tear (Dover #125). The CMA determined that it was not a potential exposure. The suit was retired from service.
32. **LAB PROCESS FAILURE SUMMARY:** 09/25/2015; An escorted BNBI employee reported that they mistakenly wore their watch into BSL-3 containment. The watch was decontaminated and brought out of the suite.
33. **LAB PROCESS FAILURE SUMMARY:** 09/30/2015; An escorted BNBI employee reported that they mistakenly wore their watch into BSL-3 containment. The watch was decontaminated and brought out of the suite.
34. **LAB PROCESS FAILURE SUMMARY:** 10/05/2015; A BNBI employee reported that approximately 40 mL of Wright-Giemsa stain spilled onto a bench and floor in a BSL-3 lab. The CHO was contacted and the spill was cleaned up.
35. **LAB PROCESS FAILURE SUMMARY:** 10/07/2015; A BNBI employee reported that two HEPA filters had been removed from BSL-3 containment after a successful VHP decontamination, but they had not been autoclaved. The standard process of autoclaving filters was not codified in any SOP as a requirement. A CAPA was created to ensure that the process would be codified in SOP 22-017.
36. **FACILITY PROCESS FAILURE SUMMARY:** 10/20/2015; A BNBI employee reported a BSL-4 suit breach (Dover #135). The CMA determined that it was not a potential exposure. The suit was repaired.
37. **PPE FAILURE SUMMARY:** 10/23/2015; A BNBI employee reported an outer glove tear (nitrile) while working in the BSL-3. The CMA determined that it was not a potential exposure.
38. **LAB PROCESS FAILURE SUMMARY:** 10/23/2015; A BNBI employee reported that a glove on a mobile class III BSC was torn while it was being moved from a laboratory to an airlock. The tear in the glove was caused when the edge of the glove port contacted a door jam. The glove was changed out and the door jam was disinfected with bleach. The CMA determined that it was not a potential exposure.