

Lab Chatter

UNIVERSITY OF NEW ENGLAND

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Table of contents:

- Page 1......Safety Spotlight: Lab Safety Shout Out!: Biology teaching labs in Alfond and Morgane
- Page 2.....Five barriers to implementing strategic direction
- Page 3.....Strategic direction continued
- Page 4.....Fire alarms
- Page 5.....Why do I need to report everything?
- Page 6.....Drone safety on and off campus
- Page 7.....Drones continued
- Page 8.....OSHA Quick Facts: Chemical Hygiene Plan
- Page 9.....OSHA Quick Facts continued
- Page 10.....UNE Chemical Sharing Program: Erlenmeyer flasks available!
- Page 10.....Lab Safety Video of the Month: Mr. Bean does chemistry
- Page 10.....Contact us

Safety Spotlight

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Lab Safety Shout Out!

This month's Lab Safety Shout Out is going out to the biology teaching labs in Morgane Hall and the Alfond Health Sciences Building. These labs were having trouble keeping the areas near their fire extinguishers, electrical panels, and eyewash stations free and clear to allow access to them in case of an emergency situation. They requested assistance from EHS to tape off the floor to give students and staff a visual reminder that nothing is to be placed in these areas. These visual reminders are a great tool for warning others about safety items in the lab area. Keep up the good work everyone!





Five Barriers to Implementing Strategic Direction: Strategy is a framework, within which decisions are made, which influences the nature and direction of the business. By David Waits | July 20, 2015 via Lab Manager.com (submitted by Jessica Tyre)



Strategy directs organizations as they make plans, marshal resources, and make day-to-day decisions. It is

imperative that strategy is clear, concise, and congruent. Otherwise organizations and people can be efficiently headed the wrong way. Companies lacking a clear, memorable, embraced strategy struggle with implementation, thwart tactical execution, and blunt their effectiveness. Take prudence to avoid these five barriers to implementing strategic direction.

Head in the Clouds

Barrier 1: Strategy that is too lofty and non-pragmatic

Many times, the strategic direction sounds good on paper but it is way too lofty. It is not pragmatic. A direction that is not pragmatic will not move people to action. Vision is a compelling picture of a future state that inspires people to perform. Strategic direction needs to be wrapped into that vision so that it gets off of the paper, off of the posters and out into the trenches where people work. This will start the process of getting the desired results. It is the direction, not intentions, that determines your organization's ultimate destiny.

Now, Now, Now

Barrier 2: Overly focused on immediacy

Because of the incredibly fast pace of business in today's world, it is easy for leaders to get preoccupied with the immediate and urgent things that are in front of them and lose sight of their main outcomes and objectives. Like the story of the little boy trying to put his finger in the dike, leaders can get caught up in moving from one emergency to the next, to the next, to the next. The immediacy of the next report or the next meeting keeps leaders from making sure that they pull back and stay focused on where they want to go. A strong strategy provides the framework for effective decisions.

But I Like It...

Barrier 3: Doing what we like to do

The third barrier that keeps leaders from implementing strategic direction is the trap of getting wrapped up in doing the things leaders like to do instead of the things the strategic direction is calling for. Think of it this way, if the strategic direction could talk what would it be asking to be done today? The answer to this question will determine decisions, establish proper priorities and clarify the next appropriate step to take. Leaders should only be focused on tasks no one else can do. If someone else can do the task, delegate it, monitor the outcomes, make appropriate corrections and celebrate progress.

Congruency/Commitment Conflict

Barrier 4: Lack of congruency at the top and commitment from the middle

It is important to have buy-in from the middle. Many postulate that leadership starts at the top maintaining that what is at the top is what filters down. There is certainly truth contained in that axiom. However, if there is not buy-in at the middle level of leadership, the implementation of the direction will be thwarted and ultimately blocked. It is important to have congruence at the top, so as a senior leadership group, there is a clarion message that is common to all top leaders. Otherwise, there will be mixed messages being sent. When there is a commitment at the middle level with congruency from the top, the lower level of leadership will help catapult strategy into success. Page 2

Strategic direction continued...

The Blinding Fog

Barrier 5: Not reviewing often enough

The last barrier that impairs consistent implementation is caused simply by not revisiting the strategy consistently. The consequence of this lack of continual review results is a loss of focus creating the calamity of operating in a dense fog. If strategic direction is not kept front and center, the forward driving force of the implementation is forfeited. Organizations and people move towards what they are focused on. Without this regular focus on strategic direction, efficient and effective implementation is impeded, if not stopped altogether.

Strategy implementation can be a long process. To implement strategic direction, first pinpoint clear messaging that is vibrant, specific and memorable. If implementation is going to be embraced and enacted, marketing your message internally to your team to facilitate buy-in from top to bottom is a critical necessity. Secondly, identify tangible milestones. Have definable indicators of the targeted results of each step of implementation and build in accountability measures for each milestone.

Thirdly, capture memories along the way to record the progress from where you started to where you are now. Many parents periodically make a mark on a chart or behind a door capturing the growth history of their children because it's so easy to miss both the subtle and the dramatic development of each child. In the same way, keep a memory chart of steps, set-backs and victories throughout the process as a reminder of the progress you have made. Looking back at successes brings hope as you move through the challenges of the future.

Source: www.labmanager.com





FIRE ALARMS

By Peter Nagle



Several members of the UNE community have expressed concerns that, when a building fire alarm is activated, some building occupants ignore the alarm and continue with their work. This is against UNE policies. Ignoring fire alarms can have dire consequences for the occupant and could endanger the lives of employees, students, visitors and first responders.

When the fire alarm sounds all building occupants must evacuate immediately to ensure their safety and the safety of others. The fire alarm system is designed to provide an early warning to allow occupants to safely exit the building during a fire or emergency situation.

Please follow the below guidelines when a fire alarm is activated:

- **NEVER** ignore the alarm, assume the alarm is false, or assume it is only a fire alarm test. You will be notified in advance if there is fire alarm testing being conducted.
- Everyone **MUST** evacuate the building by way of the safest and closest exit and/or stairway.
- **NEVER** use an elevator to exit during fire alarm activation.

• Once outside the building, move away from the building and assemble at your muster location. A list of muster points for all UNE buildings can be found online in the Security section of the UNE website in the Annual Security and Annual Fire Safety Report: http://www.une.edu/studentlife/security/safety-reports

• Do not obstruct access to the front of the building where the first responders and emergency vehicles will be operating.

• Once outside, **NEVER** re-enter the building until authorized to do so by the fire department or UNE Safety & Security personnel.

When all building occupants follow the above instructions, the UNE community will be prepared for an actual emergency that could prevent a dangerous situation from becoming fatal.

Thank you in advance for your cooperation!

Why do I need to report everything?? by Jessica Tyre

Example 1: An employee cuts their finger, rinses it out and puts a bandage on it.

What could go wrong? At the time of the incident a chemical or biological agent may have entered the wound and signs of infection begin to show up a few days later causing pain, discomfort, or illness. If this was reported at the time of the incident, it would already be documented and the university would be able to assist the employee more swiftly.

Example 2: An employee trips outside on a raised brick on a walk way. Their ankle is a little sore but they can still walk on it so they do not report it or seek medical treatment.

What could go wrong? When the employee goes home at the end of the day, their ankle swells up and the soreness gets worse. They think they may have broken or severely strained their ankle and now they are having trouble walking on it. If they reported it at the time of the incident, Security would encourage them to seek medical attention and they may have known the severity of the injury sooner and not walked around on it for an entire day, possibly making the injury worse.

The list could go on and on and on, but one thing is clear: **REPORT EVERYTHING**, no matter how minor you may think it is. *Nothing* can turn into *something* very quickly and UNE wants to be here for you!

How do I report an accident or incident?

- **1.** Always let your immediate supervisor know when you have had an accident or incident and fill out an accident report form.
- **2.** Report the incident to UNE Security at the time of the event. They will assist you in the reporting process.
- **3.** Follow up with your Supervisor if the issue does not improve.
- **4.** If it is an employee injury, follow up will be conducted by Human Resources. If it is a student injury, there may be several departments involved and that will be determined based on the incident report.



Drone safety on and off campus

By Ronnie Souza

Introduction

The confluence of advanced technologies in lightweight batteries, electric motors, digital imaging, and wireless communications has led to a new generation of small, powerful drones. These devices are easy-to-operate, often multi-rotor helicopter style machines, capable of vertical take-offs and landings, with extended hovering abilities that are well-suited for observational purposes. Drones have become so affordable that hundreds of thousands were sold in the US during the 2015 winter holiday gift season alone.

Besides recreation, significant numbers of drones are also in commercial and academic use. Drones have proven important for remote viewing, inspection, and specialized imaging wherever direct human presence is dangerous or expensive. They are in wide and growing use in agriculture and forestry, building and structural surveys, aerial mapping, real estate sales, advertising, sporting events, news reporting and motion picture production.

Although many colleges and universities have long histories with drones, recent expansions in capabilities and affordability have led to much wider use. These include curricular and non-curricular programs, including athletics, facilities/plant operations, alumni organizations, public affairs, and student clubs.

What is a Drone?

According to the FAA (Federal Aviation Association), a drone (officially an Unmanned Aircraft System or UAS), is any unmanned aircraft and the associated support equipment, controls, data links, telemetry, communications, and navigation instrumentation necessary to fly the aircraft.

Can I Use a Drone at UNE?

UNE is currently developing a comprehensive drone use policy. Prior to drone use, Don Clark, UNE Director of Safety and Security, must be contacted to authorize drone activities on campus related to UNE business, (i.e. research, class lectures, facilities maintenance) or recreational use.

Federal Rules and Regulations

The FAA has statutory responsibility for regulating the safety of our national airspace system, including drone flights. Drones are formally classified as Unmanned Aircraft Systems (UAS), and described as mechanically-propelled devices greater than 0.55 pounds in weight that are capable of sustained flight in air, operated by ground-based controls, and kept in communication through data links and software. The FAA issued a final rule effective August 29, 2016 entitled Operation and Certification of Small Unmanned Aircraft Systems (sUAS).

Continued on next page...



Drones continued...

Operational Limitations

- Unmanned aircraft must weigh less than 55 lbs. (25 kg).
- Aircrafts weighing between 0.55 55 pounds must be registered.
- Must be flown within line-of-sight, during daylight, and with weather visibility of at least 3 miles.
- Flights are prohibited directly over people (non-participants) or inside vehicles.
- Must yield right-of-way to all other aircraft.
- Must not exceed groundspeed of 100 mph or altitude of 400 feet above ground.

• If flown higher (e.g., inspecting a tall building or structure), the sUAS must remain within 400 feet of the structure.

• Operations in Class G airspace allowed without permission from local airport air traffic control; any other airspace requires advance permission.

• Only one sUAS may be flown at a time by a remote pilot in command.

Remote Pilot in Command Certification and Responsibilities:

- sUAS operators must possess a remote pilot certificate or be directly supervised by a person who does.
- Remote pilots in command must maintain records, report any accidents or incidents, and conduct preflight inspections.
- Qualifications for a remote pilot certificate include:
 - At least 16 years of age.
 - Demonstrate aeronautical knowledge by passing a test at an FAA-approved Knowledge Testing Center or, for those who already hold a traditional pilot license, completing the FAA's sUAS online course.
 - Successful Transportation Security Administration (TSA) background check.

Based on Campus Consortium Environmental Excellence Workshop on Drones, held February 3rd, 2016 at MIT's Lincoln Laboratory, Lexington, Massachusetts





Page 7

OSHA® FactSheet

Laboratory Safety Chemical Hygiene Plan (CHP)

OSHA's Occupational Exposure to Hazardous Chemicals in Laboratories standard (29 CFR 1910.1450), referred to as the Laboratory standard, specifies the mandatory requirements of a Chemical Hygiene Plan (CHP) to protect laboratory workers from harm due to hazardous chemicals. The CHP is a written program stating the policies, procedures and responsibilities that protect workers from the health hazards associated with the hazardous chemicals used in that particular workplace.

Required CHP Elements

- 1. Standard operating procedures relevant to safety and health considerations for each activity involving the use of hazardous chemicals.
- 2. Criteria that the employer will use to determine and implement control measures to reduce exposure to hazardous materials [i.e., engineering controls, the use of personal protective equipment (PPE), and hygiene practices] with particular attention given to selecting control measures for extremely hazardous materials.
- 3. A requirement to ensure that fume hoods and other protective equipment are functioning properly and identify the specific measures the employer will take to ensure proper and adequate performance of such equipment.
- 4. Information to be provided to lab personnel working with hazardous substances include:
 - The contents of the Laboratory standard and its appendices.
 - The location and availability of the employer's CHP.
 - The permissible exposure limits (PELs) for OSHA regulated substances or recommended exposure limits for other hazardous chemicals where there is no applicable OSHA standard.
 - The signs and symptoms associated with exposures to hazardous chemicals used in the laboratory.
 - The location and availability of known reference materials on the hazards, safe handling, storage and disposal of hazardous chemicals found in the laboratory including, but not limited to, the Material Safety Data Sheets received from the chemical supplier.

- The circumstances under which a particular laboratory operation, procedure or activity requires prior approval from the employer or the employer's designee before being implemented.
- Designation of personnel responsible for implementing the CHP, including the assignment of a Chemical Hygiene Officer and, if appropriate, establishment of a Chemical Hygiene Committee.
- 7. Provisions for additional worker protection for work with particularly hazardous substances. These include "select carcinogens," reproductive toxins and substances that have a high degree of acute toxicity. Specific consideration must be given to the following provisions and shall be included where appropriate:
 - · Establishment of a designated area.
 - Use of containment devices such as fume hoods or glove boxes.
 - Procedures for safe removal of contaminated waste.
 - · Decontamination procedures.
- 8. The employer must review and evaluate the effectiveness of the CHP at least annually and update it as necessary.

Worker Training Must Include:

- Methods and observations that may be used to detect the presence or release of a hazardous chemical (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.).
- The physical and health hazards of chemicals in the work area.

- The measures workers can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect workers from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
- The applicable details of the employer's written CHP.

Medical Exams and Consultation

The employer must provide all personnel who work with hazardous chemicals an opportunity to receive medical attention, including any follow-up examinations which the examining physician determines to be necessary, under the following circumstances:

- Whenever a worker develops signs or symptoms associated with a hazardous chemical to which the worker may have been exposed in the laboratory, the worker must be provided an opportunity to receive an appropriate medical examination.
- Where exposure monitoring reveals an exposure level routinely above the action level (or in the absence of an action level, the PEL) for an

OSHA regulated substance for which there are exposure monitoring and medical surveillance requirements, medical surveillance must be established for the affected worker(s) as prescribed by the particular standard.

- Whenever an event takes place in the work area such as a spill, leak, explosion or other occurrence resulting in the likelihood of a hazardous exposure, the affected worker(s) must be provided an opportunity for a medical consultation to determine the need for a medical examination.
- All medical examinations and consultations must be performed by or under the direct supervision of a licensed physician and be provided without cost to the worker, without loss of pay and at a reasonable time and place.

For additional information on developing a CHP, consult the following sources:

- View the complete standard at the OSHA Web site, www.osha.gov.
- Appendix A of 29 CFR 1910.1450 provides non-mandatory recommendations to assist in developing a CHP.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; the teletypewriter (TTY) number is (877) 889-5627.

For assistance, contact us. We can help. It's confidential.



OSHA FS-3461 8/2011 DSG

UNE Chemical Sharing Program

The UNE Chemical Sharing Program is a great way to reduce hazardous waste, reduce costs for your department, and have a positive environmental impact on campus. If you have any commonly used lab chemicals that you are thinking of disposing, please contact EHS so they can be listed in the next issues of EHS Lab Chatter as available for the UNE Chemical Sharing Program.

Items currently available:

1 bottle of Polysorbate 80 - 500ml-unopened.

Erlenmeyer flasks:

34x 500ml 95x 250ml 2x 125ml Please email: jtyre@une.edu if you are interested in acquiring these items. Thank you!

Lab Safety Video of the Month:

Mr. Bean Does Chemistry



https://www.youtube.com/watch?v=6aK2CKrdjbE

This video link is for entertainment purposes only; do not imitate this behavior in any lab.



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