Throughout the year, emergencies of all types occur throughout the University of Delaware. Most of us now carry cellular telephones as our primary means for all communications, but there may come a time the cell phone is left in the car, the residence room, or the office, and something happens that emergency forces need to be summoned. The university, through UDPD and Network Services, has emergency blue light phones deployed throughout the campus, primarily outdoors, but in some situations indoors too.

HOW DO THEY WORK:
The blue light phones are a two-way means of communication between the user and the University Police Communications Center (UCOMM). The phone operation is very simple, since when they are needed, time is of the essence. Simply press the red button and wait for the UCOMM Dispatcher to answer. The dispatcher asks “9-1-1, what’s your emergency”. This is your opportunity to provide critical information such as the emergency location, the nature of the emergency, whether anybody is hurt, is an ambulance needed, is there a fire, or is there a criminal act occurring. UCOMM treats all emergency blue light calls as active 9-1-1 calls and immediately dispatches a police unit to the scene. Each blue light telephone automatically displays the actual location of the phone on the dispatch screen. This is very important if somebody is being pursued and only has time to press the red button while on the run. The dispatched UDPD officer will respond to the phone location and the caller can hopefully circle back to meet the UDPD officer.

Article continued on page 2
Where can I find a Blue Light on campus?
The Blue Light Phones are found around most of the University Buildings, primarily in parking lot areas, and the exteriors of buildings near major walkways.

A walkabout map of locations is available on the UDPD webpage at http://www1.udel.edu/police/downloads/walkaboutmap.pdf

The Emergency Blue Light Phones are also located indoors in our Residence Halls, Laboratories, The Morris Library and the Bob Carpenter Center. In some cases, the phones are the older style red phones. In this case, just pick up the handset; the call will be placed without any need to dial. All University of Delaware elevators have an emergency call button that works in the same manner as the Blue Light Phone. Simply press the emergency button and the UCOMM operator will take the call.

Who Tests and Who Maintains the Blue Lights?
All outdoor Blue Light Phones are tested on a prescribed frequency by UDPD. All Residence Hall phones are tested semi-annually by EHS/Fire Safety during the building fire inspections, and Safety Committees are requested to test the phones during Quarterly Facility Safety and Security inspections.

The Quarterly Inspection form link can be found here: http://www1.udel.edu/ehs/safetycomm/downloads/MasterInspectionform.pdf

Safety Committees need to contact UCOMM at 302-831-2222 prior to testing to assure the dispatcher is aware that the call is a test and not a true emergency 9-1-1 call.

University Network Services is the service provider of the phones and can take calls for phones not working or with audibility and other problems by calling 302-831-2411.

For general questions regarding the Blue Light Phones we have on campus, please contact Public Safety at 302-831-2224.
Congratulations! You’ve been awarded a grant to perform exciting biological research here at the University of Delaware. You have your list of supplies to buy, and you know that you’ll need to purchase some ventilation equipment in order to conduct your research experiments.

But... there’s just one issue. What TYPE of equipment to buy? Where do you start?

The first item to check off the list is to contact EHS. We can help determine the type and size biosafety cabinet needed based on the type of research that will be performed, if you need it.

According to Labconco’s biosafety cabinet brochure, “Selecting the proper type of biosafety cabinet depends on the following: (1) the type of protection required—(a) product protection only b) personnel and environmental protection only c) product, personnel, and environmental protection, (2) the different types of work that will be done in the cabinet, (3) the types and quantities of toxic materials that will be used in the course of the work, (4) the type of exhaust system that will be needed.

Items 1, 2 and 3 are all determined by the user of the cabinet, based on his/her individual needs. Item 4 will be determined by the first three. Biological containment is not an issue - ALL Class II cabinets are designed for Biosafety Levels 1, 2 and 3 containment. No one type offers superior aerosol containment over the others.”

If you already know the type of cabinet you want, send us the product and purchase information so EHS can approve it.

Below is a helpful table of the three classes of biosafety cabinets and differences between them. The most common type of biosafety cabinet that we have on campus is a Class II Type A2. Currently we have no Class I or Class III on campus.

<table>
<thead>
<tr>
<th>Class</th>
<th>Type</th>
<th>General Description</th>
<th>Exhaust</th>
<th>Chemical Use?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>N/A</td>
<td>Personnel and environment protection only No product protection</td>
<td>Air enters at front then exhausted through HEPA back into room</td>
<td>No</td>
</tr>
<tr>
<td>II</td>
<td>A1</td>
<td>Product, personnel and environment protection</td>
<td>70% recirculated to the cabinet work area through HEPA 30% balance can be exhausted through HEPA back into the room or to outside through a canopy unit</td>
<td>No</td>
</tr>
<tr>
<td>II</td>
<td>A2</td>
<td>Product, personnel and environment protection</td>
<td>Similar to II, A1 but has higher intake air velocity exhaust air can be ducted to outside through canopy unit or return to room</td>
<td>Yes (minute amounts which requires canopy connection)</td>
</tr>
<tr>
<td>II</td>
<td>B1</td>
<td>Product, personnel and environment protection</td>
<td>30% recirculated, 70% exhausted. Exhaust cabinet air must pass through a dedicated duct to the outside through a HEPA filter</td>
<td>Yes, but must work towards rear of cabinet</td>
</tr>
<tr>
<td>II</td>
<td>B2</td>
<td>Product, personnel and environment protection</td>
<td>No recirculation, total exhaust to the outside through a HEPA filter</td>
<td>Yes</td>
</tr>
<tr>
<td>III</td>
<td>N/A</td>
<td>‘Clone Box’ Typically seen in higher containment labs (only cabinet approved for BSL-4)</td>
<td>Supply air is HEPA filtered. Exhaust air passes through 2 HEPA filters and is exhausted to outside via hard connection</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Article continued on page 4
Once approved, and once the cabinet arrives to the lab, we will need to coordinate a time for our outside vendor to certify the unit to ensure that it is working to its full potential.

Now that you have your biosafety cabinet installed and certified, you are ready to perform your work! A few items to remember when using the unit: (1) Don't use an open flame in a biocabinet. It can disrupt airflow, and those filters are paper! (2) Be sure that you're working with an appropriate sash height, depending on the manufacturer guidelines. (3) Keep your work area inside the cabinet as clean as possible. Too much clutter can disrupt the airflow, and may cause contamination issues!

EHS provides a yearly maintenance certification by an outside vendor for all the units located on campus. Any additional maintenance/certifications are at the department's expense.

If you are interested in purchasing a biosafety cabinet, contact the EHS office 302-831-8475.

---

**SUMMER IS JUST AROUND THE CORNER! ARE YOU BEING SAFE IN THE SUN?**

With summer’s sunny weather approaching, it is important to be mindful that, although some exposure to sunlight is essential for healthy living, over-exposure to the ultraviolet (UV) component of sunlight presents some risks. Below are UV facts and recommendations from the Center for Disease Control and Prevention (CDC).

Ultraviolet (UV) rays are a part of sunlight that is an invisible form of radiation. UV rays can penetrate and change the structure of skin cells. UV radiation can cause damage to connective tissue and increase a person's risk of developing skin cancer.

Sunlight exposure is highest during the summer, between 10:00 a.m. and 4:00 p.m. Being outdoors during these times increases the chances of getting sunburned. There is a risk of UV radiation over-exposure even on cloudy days.

Follow these recommendations to protect yourself from UV damage:

- Wear sunscreen with a minimum of SPF 15. SPF is a measure of protection. An SPF of 15 will allow a person to stay out in the sun 15 times longer than they normally would be able to stay without burning.
- Old sunscreens should be thrown away because they lose their potency after 1-2 years.
- Sunscreens should be liberally applied at least 20 minutes before sun exposure. Reapply them at least every 2 hours and each time you get out of the water or perspire heavily.
- Another effective way to prevent sunburn is by wearing appropriate clothing. Dark clothing with a tight weave is more protective than light-colored, loosely woven clothing. Wear wide-brimmed hats and sunglasses with almost 100% UV protection and with side panels to prevent excessive sun exposure to the eyes.
- Perform occasional skin cancer checks and consult with your doctor if you see something suspicious.

For more information visit: [https://www.cdc.gov/niosh/topics/sunexposure/skincancer.html](https://www.cdc.gov/niosh/topics/sunexposure/skincancer.html)
How do you identify if a Standard Operating Procedure (SOP) is required for the material you are planning to use? What is the procedure for submitting your SOP and, once approved, how can you safely handle the material? All of these questions are answered in the new High-Hazard Chemicals training module available on BioRaft.

The training provides a review of hazard identification via Safety Data Sheets, a look at the hierarchy of controls pyramid, and covers material classes such as Pyrophoric chemicals, Nanomaterials, [potentially] Explosives, Poison gases, and Corrosive chemicals. The training is unique because it allows you to review all of the material classes or just the ones that are pertinent to your research.

The current SOP template library can be downloaded from the EHS website under Research & Lab Safety > Standard Operating Procedures, or by following the link below:
http://www1.udel.edu/ehs/research/chemical/lab-operations.html

If you have questions about the materials you are working with, please reach out to your Departmental Chemical Hygiene Officer, or email EHS at dehsafety@udel.edu.
We should all have a zero injury mindset (all injuries are preventable), but should a UD employee suffer a work-related injury, it needs to be documented by their supervisor/PI within 24 hours.

A promptly completed First Report of Injury not only starts the Worker’s Compensation process but it alerts EHS to potential safety issues that could affect other members of the UD Community.

To help expedite injury reporting, a new WebForm is now available. The new WebForm still gathers critical information for Worker’s Compensation claims but now in a cross-platform format that simplifies reporting.

The link is https://udapps.nss.udel.edu/casforms/ehs/firstreport/ and is available in a number of places on the EHS website.
The form, when submitted, is automatically sent to Labor Relations and EHS. The originator also receives a copy via e-mail. An excerpt of the form appears below. The red asterisk fields are required. If any of this information is unknown, please enter “not available” and send the information in an e-mail to Juanita Crook in Labor Relations. It is important to complete the report as soon as possible, but no later than 24 hours after the injury occurs.

First Report of Occupational Injury or Disease
Use this form to report an occupational injury or disease. If you have questions, contact Environmental Health & Safety at (302) 831-6473. Do not include any sensitive information such as Social Security numbers or insurance information.
Symbol key:  ● Required information,  ▲ Error:

Form Originator

Originated by:  Verdi, John (702492391)
Safety Officer
Environmental Health & Safety (4150)
VERDU@UDEL.EDU  ☑
302-831-3081

Injured party

Name of injured party:  ● Injured party same as Originator:

Employee ID:  ●

Email:  ● (use format xxx@udel.edu)

Primary job title:  ●

Department or division:  ● If department or division are not found, choose “Other”.

Choose one:

Also, remember to document the incident investigation on the incident investigation form when the incident investigation is complete.
http://www1.udel.edu/ehs/generalhs/downloads/Incident%20Investigation%20Form.pdf

The Student/Visitor Injury/Illness Form has not changed.

If you have any questions about the form or any part of the injury/illness reporting and investigation process, please direct them to John Verdi at x3081 or Bill Harris at x8274.

Environmental Health and Safety would like to hear from you!

We encourage all members of the UD community to submit safety improvement ideas on campus.

You may submit ideas that impact your personal safety here on campus or the safety of the greater community.

Your participation will help raise safety awareness in our community!

Please submit your safety concerns/ideas via email to dehsafety@udel.edu