



ENVIRONMENTAL HEALTH & SAFETY

Office of Administration Learning Series
April 24, 2019

Awareness and involvement helps to ensure safety and compliance.

Welcome. This presentation was prepared as part of the Office of Administration Learning Series.

The goal of this session is to raise awareness about “Safety Culture”, describe some of the services that the Department of Environmental Health & Safety provides, and focus on 5 areas, that EH&S frequently get questions about...

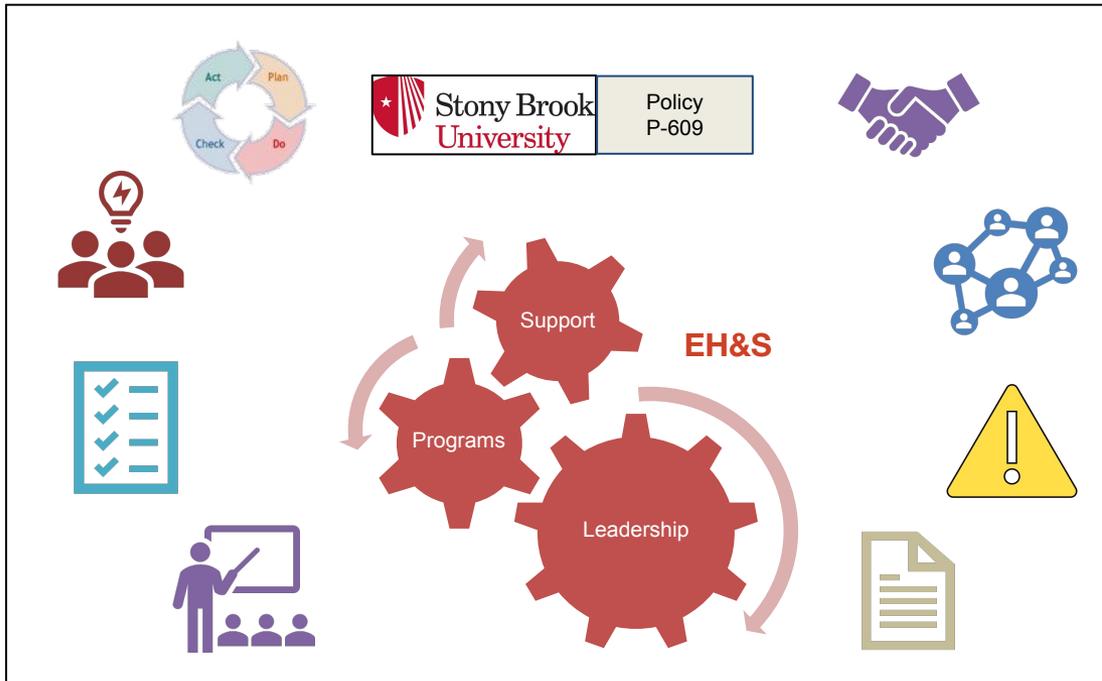
- *Fire prevention in the workplace*
- *Hazardous and universal waste disposal*
- *Accident reporting and investigation*
- *Safety training*
- *Integrated pest management*

At the end of the presentation, you will find our contact information. We welcome any feedback and questions that you may have, and encourage you to report any safety hazards or concerns.

*Gary Kaczmarczyk
Assistant Vice President, EH&S*



Safety Culture



Stony Brook University is committed to protecting the global and local human and natural environments, and promoting a safe and healthful campus community.

A good safety culture requires a number of essential components, including:

- *Management commitment*
- *Employee engagement*
- *Hazard recognition*
- *Policies and procedures*
- *Training*
- *Inspections/Audits*
- *Collaboration*
- *Continuous improvement*

[University Policy P609](#) establishes the framework for a comprehensive safety program using an Environmental Health & Safety Management System (EHSMS).

The EHSMS establishes roles and responsibilities for all individuals of the Campus Community.

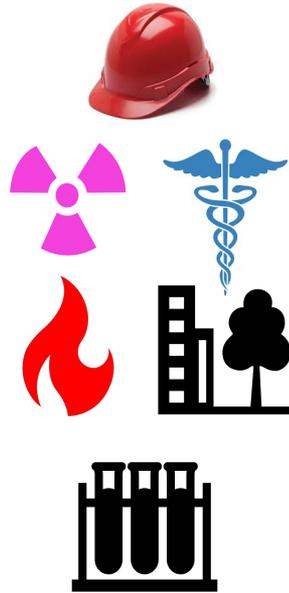
EHS provides leadership, develops and implements programs, and provides support for implementing

Our Vision: To promote a strong safety culture where everyone feels responsible for demonstrating caring behavior with a commitment to safety.



EH&S Programs & Services

- Safety & Training
- Environmental Compliance
- Radiation Safety
- Healthcare Safety
- Fire Safety
- Environmental Services
- Laboratory Safety
- Hazardous Waste



Our Mission: Provide leadership and programs that foster a sustainable safety culture, and support the advancement of academic, research, healthcare and community activities of the University.

EH&S develops and implements a variety of programs and services help to ensure safety and compliance.

Our programs are tailored to support the academic, research, healthcare and community activities of the University in the classroom, laboratories, clinical areas of the hospital, and throughout the campus.

We have safety professionals with expertise in the areas of chemical, biological and radiological safety, occupational safety, environmental protection, industrial hygiene, and healthcare safety.

EH&S provides round-the-clock fire safety coverage with trained emergency responders, hazmat technicians and technical rescue specialists.

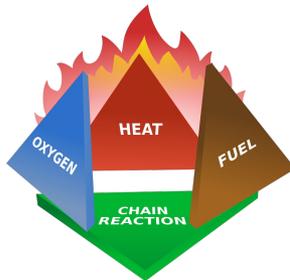
Our goals are...

- *Hazards are anticipated, identified, evaluated, and eliminated or controlled*
- *Students, faculty and staff are trained and aware of potential hazards and requirements*
- *Injuries and illnesses are prevented*
- *Programs and activities comply with regulations*



Fire Causes and Impacts

- Cooking
- Open flames
- Electrical
- Hot work
- Smoking



Our goal : To raise awareness about the importance of fire safety for the campus community through education and enforcement.

The University Fire Marshal's are committed to providing fire safety education for students, faculty and staff of the campus community. In addition to enforcing fire and life safety codes, our goal is to increase the awareness of fire safety across campus.

The fire tetrahedron is a representation of the four elements necessary for fire:

- Heat
- Oxygen
- Fuel
- Chain Reaction

Some of the major causes of fires and contributing factors include:

- Cooking - unattended cooking, cooking with oil and use of high heat.
- Open flames - use of candles, matches, lighters near combustibles.
- Electrical - improper use of extension cords, surge protectors, frayed wires, and overheated electronics.
- Hot work - welding and the use of torches near flammable and combustible materials.
- Smoking - careless smoking and discarding of cigarette butts.



Fire Causes and Impacts



1. Residential (off campus - electrical)



2. Conference Room - electrical



3. Residential - cooking equipment

Fire doubles in size approximately every 30 seconds. Most victims of fire succumbed from smoke inhalation rather than exposure to burns. Toxic by products released during a fire can be deadly.

The impacts of fire can be devastating.

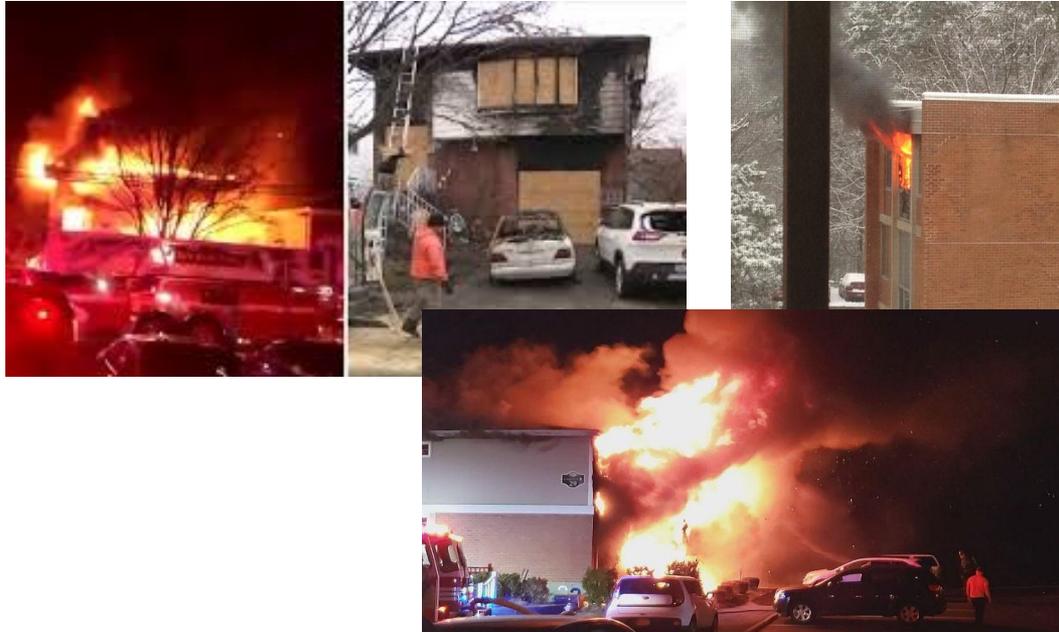
1. *This (off campus) residential fire was caused by a portable air conditioner. This fire claimed the life of one adult victim.*
2. *This fire in a conference room was caused by a faulty laptop battery that was left plugged in overnight.*
3. *This fire was possibly caused by a cooking appliance that was placed within a clothing closet shortly after being used.*

Key points to minimize impacts...

- *Immediately Report Emergencies to University Police.*
 - *Dial: 631-632-3333 or 333 from any campus landline phone.*
- *Early detection is imperative. Never tamper with smoke detectors or fire protection equipment.*
- *Familiarization of floor plans and means of egress is key. Always know two ways out from any location.*
- *Prompt evacuation is key for survival.*



Fire Causes and Impacts

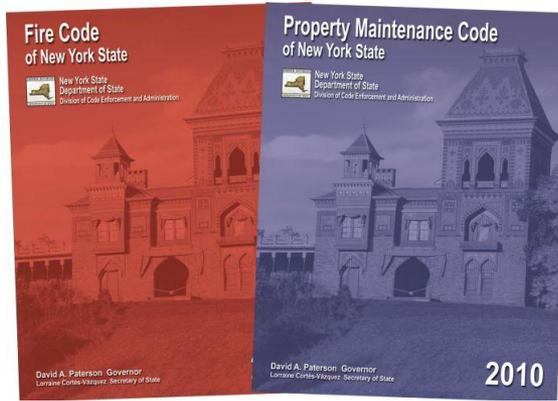


Fire safety should become part of our daily routine and lifestyle, and should be promoted within the workplace and our homes. Fires claim the lives of people everyday and we need to raise our awareness. Practice fire drills at home. E.D.I.T.H (Exit Drills In The Home)

- ❖ *The image located on the left occurred on 1/1/19 in New Hyde Park. This fire claimed the life of a 68 year old Woman, and a 4 year old Child. This fire was caused by an open flame. A 10 year old male had to evacuate via a second story bedroom window. (Note: Emergency Egress Ladders are available at most local home repair centers)*
- ❖ *The image located on the top right occurred on the campus of SUNY Oneonta and was caused by an extension cord.*
- ❖ *The image on the bottom right occurred on March 17th 2019 at the Colony Hill apartment complex. A family of three including a baby was trapped on the 2nd story balcony. The Husband jumped to the ground, and had to catch his child that was tossed from the balcony. This fire was started by an improperly disposed cigarette.*



Annual Fire Inspection Process



This annual inspection program further ensures a safe campus by the enforcement of fire and life safety requirements.

The NYS Office of Fire Prevention and Control (OFPC) has the responsibility to annually inspect buildings under the jurisdiction of public and private colleges within New York State.

OFPC is empowered to issue certificates of compliance, notices of violations and orders to comply as part of the inspection process.

OFPC may also impose fines up to \$500 per day for violations that are not corrected by the established abatement dates.

If you receive a notice of violation, please take steps to correct the violation immediately.

Contact your Building Manager or the Fire Marshal's office if you have any questions.



Fire Prevention & Compliance

- Use surge protectors properly
- Reduce combustible materials and remove waste
- Keep fire and smoke doors clear
- Have an emergency/exit plan
- Evacuate when the fire alarm sounds

*In a fire
seconds
count...
know
two
ways
out!!!*

Fire safety in the workplace begins with each of us being mindful about fire safety!

To ensure safety and compliance in your area...

- *Do not use extension cords as a substitute for permanent wiring.*
- *Use only (UL Listed) power strips (surge protectors).*
- *Multi-plug adapters, and ganged surge protectors are prohibited. Do not link together.*
- *Keep the storage of combustible materials orderly, and a minimum of 18" below sprinkler heads (2 feet below ceiling in non-sprinklered buildings).*
- *Do not store combustible materials in stairwells, hallways, exits, electrical or mechanical equipment rooms.*
- *Do not prop open fire doors, or block exits, electrical panels, or fire protection equipment.*
- *Report electrical hazards, fire doors that do not close & latch, exit lights that don't work, etc.*
- *When the fire alarm is activated, evacuate immediately.*



Hazardous Waste

- Stony Brook University generated over 38,000 lbs of hazardous wastes last year
- Once a waste is created, we own it forever
 - “Cradle-to-grave”
 - Why?



Once a waste is generated at Stony Brook, we own it forever!

Stony Brook University generates 18-24 tons of hazardous (chemical) waste each year. Stony Brook University Hospital generates an average of 10 tons per year.

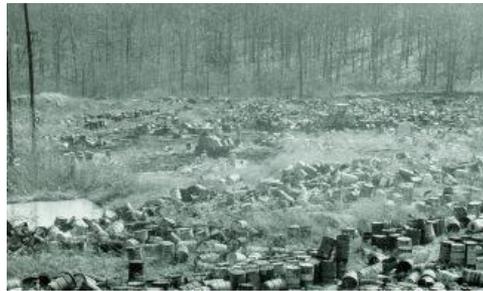
State and Federal regulations stipulate specific requirements for managing those wastes, including:

- *Labeling of wastes*
- *Types of containers*
- *Limits on how long wastes can be stored*
- *Transportation of hazardous wastes*
- *The types of facilities that wastes can be shipped to*
- *Specific disposal and treatment standards for wastes which must be met*
- *Training for personnel who generate, handle, or manage wastes in the workplace*

“Cradle-to-grave” - once a waste is generated as part of our daily operations we own it - forever.



Unregulated Disposal of Hazardous Waste



Valley of the Drums, Kentucky (1967 - 1990... 2008+?)

- 100,000 barrels of waste
 - 73,000 dumped out on site
 - 27,000 left above ground or buried
- Discovered when a fire burned for over a week

Proper management of hazardous wastes protects not only the environment, but the surrounding communities as well.

Before there were federal laws regarding the management of hazardous wastes, it wasn't uncommon for people to simply bury their waste.

In 1967, a man from Kentucky opened a "hazardous waste disposal" business, using his 23 acre farm for the "disposal" of thousands of barrels of toxic chemical wastes that were either buried or emptied right into the ground.

Local authorities became aware of the use of the land for this purpose when a fire started burning on the property. The fire continued to burn for 7 days.

The cleanup of the land had to be federally funded, after the death of the owner in 1977, and it took over a decade to complete.

Even today, the state of Kentucky continues to monitor the surrounding lands for potential hazardous contaminants that may have migrated. In 2008 over 50 additional barrels of waste were located in an area just past the property limits.



Buried wastes don't always stay buried



Love Canal, NY (1955-2004)

- ~40,000,000 lbs of waste
- School board bought the land, then sold to developers for homes

“Syringe Tide” 1987-1988

- Poorly managed waste from Fresh Kills Landfill, Staten Island
- Affected NY, NJ, and CT
- “...hypodermics on the shore...” sings Billy Joel in *We Didn't Start the Fire*



Improper disposal of hazardous wastes can have far reaching effects that can last decades or affect large areas of land.

The Love Canal, a became an environmental disaster and human tragedy.

Beginning in the 1920's an abandoned canal project in Niagara, NY was used as a dump site for municipal and industrial chemical wastes.

In 1953, the Hooker Chemical Company, then the owners and operators of the property, covered the canal with earth and sold it to the city for one dollar.

In the 1970's toxic chemicals and rotting drum containers began percolating upward through the soil and leaching into the backyards and basements of homes and a public school built on the banks of the canal in the late '50s.

A national state of emergency was declared in 1978. Families were moved, the school and homes were destroyed. Residents experienced serious health related issues, including neurological diseases and cancers.

During the Syringe Tide, medical wastes from a Staten Island landfill that were dumped into the ocean, washed ashore on beaches in NY, NJ, and CT. This lead to new regulations for the handling and disposal of medical wastes.



Hazardous Waste

- What kinds of wastes?
 - Chemicals (laboratories, housekeeping, office supplies)
 - RMW (laboratories, athletics, community sharps)
 - Universal Wastes (batteries, lamps/bulbs, mercury-containing devices)



Hazardous wastes are not only generated in laboratories on campus. Any area or department on campus can generate hazardous wastes. It is important to manage these wastes properly to prevent them from ending up in landfills or the environment.

The Environmental Health and Safety Department is responsible for properly managing hazardous wastes on campus from all areas and departments. We provide training and guidance related to the handling, storage, and disposal of hazardous wastes, and work to ensure that wastes are managed in a way which prevents them from becoming future problems for ourselves or others.

EHS looks for management technologies that help to reduce generation of hazardous materials (recycling), reduce the hazards of generated wastes (treatment), and to prevent landfilling of wastes (incineration). We contract with qualified, authorized and permitted companies to ensure our wastes are managed in ways that reduce their future impact.

Hazardous wastes can be generated from any area of campus, including administrative areas and non-laboratory spaces.



Hazardous Waste

Have waste? What do I do?

- Get trained...
 - Blackboard - ENV 001 - Hazardous Waste Management
- Email: Hazwaste@stonybrook.edu



Training is available to the entire campus for managing hazardous wastes. Training is required for some (laboratory personnel, etc), but all are welcome to take our courses online via Blackboard.

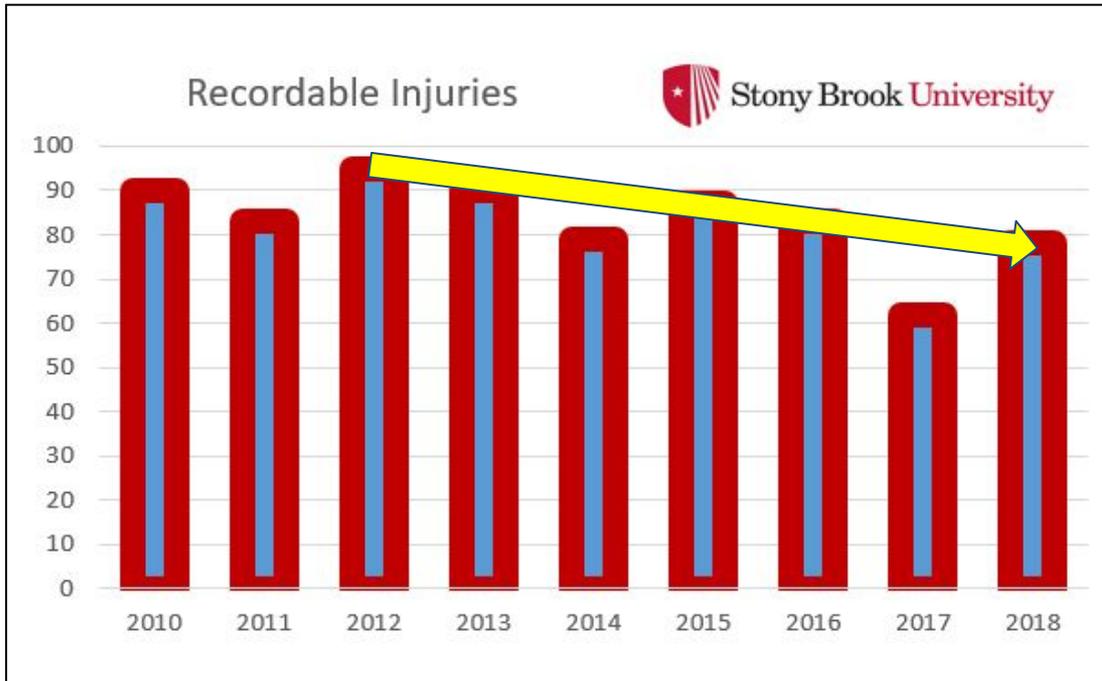
We can help provide answers to many waste-related questions, such as:

- *Are the materials I work with hazardous?*
- *How do I dispose of them properly?*
- *Am I required to take training on hazardous materials handling or hazardous waste management?*
- *What wastes does my area generate?*
- *How can I better protect myself from the materials I work with and dispose of?*

If you have questions related to hazardous wastes, contact us! HazWaste@stonybrook.edu



Accident Reporting



Stony Brook University strives to continually reduce recordable injuries.

The top three leading causes of work-related injuries include:

- *overexertion and bodily reaction (lifting, pulling, pushing);*
- *contact with objects and equipment, and*
- *slips, trips and falls.*

Injuries can be prevented with an increase in hazard assessments and awareness, communication about requirements, coordination with affected departments, eliminating hazards with appropriate work practices and engineering controls, using personal protective equipment (PPE), and improved training.

Injuries must be immediately reported to ensure:

- *Proper care for the injured worker.*
- *Thorough investigation of the cause.*
- *Elimination of any potential hazard.*
- *Prevention with lessons learned.*



Accident Investigation



It is important to promptly report all incidents and injuries, no matter how small.

Accident investigations are a critical part of the injury prevention program. It is important to promptly report all incidents and injuries, no matter how small.

To Report a Work Related Injury or Illness:

- 1. Report your injury or illness to your supervisor.*
- 2. Seek medical attention.*
- 3. Call the NYS Accident Reporting System (ARS), as soon as possible.*
- 4. Complete a Employee Injury/Illness Incident Report*

Accident investigations are to focus on identifying root causes (underlying reasons), not establishing fault.

Determining the underlying reasons help to identify hazards and shortcomings in procedures, training, etc., and to recommend corrective actions so that similar incidents don't occur in the future.

More>> [HRS Workers' Compensation website](#)



Safety Training

Promoting Safety

EHS provides programs and services that promote a sustainable safety culture

[BROWSE SERVICES >](#)

CALENDAR	
Monday, April 22	
Thursday, May 9	
2:30pm	Annual Respirator Fit Testing/Training
3:15pm	Annual Respirator Fit Testing/Training
Friday, May 17	
1:00pm	Supervisor Safety Training / Suffolk He
2:30pm	Accident Investigation _ Workers Com
Thursday, June 13	
7:30am	Annual Respirator Fit Testing/Training
8:15am	Annual Respirator Fit Testing/Training
Showing events until 6/30. Look for more	

Need an Assessment or Safety Training?

Call 632-6410

email dale.clarkson@stonybrook.edu

go to <https://ehs.stonybrook.edu/>

Training and awareness is an essential part of safety and compliance.

EH&S provides training on a wide-range of safety, health and environmental topics. Many of these courses are required, either initially or annually, by Federal or State regulations.

The following types of activities require training:

- Ship hazardous materials
- Operate powered industrial trucks
- Enter confined spaces
- Perform welding, grinding or other “hot work”
- Wear personal protective equipment
- Work on electrical or mechanical systems
- Work with or near hazardous chemicals.
- Work in a laboratory or machine shop
- Generate hazardous waste, regulated medical waste, or universal wastes.
- Work with or manage the storage of petroleum products
- Have exposure to blood or other potentially infectious materials

For a full list of EH&S training and requirements, please visit the [EH&S Training website](#).



Online EH&S Training



Training Course List and Descriptions

PLEASE SELECT FROM THE FOLLOWING COURSES:

▾ Fire Safety

▸ Industrial Hygiene

▸ Lab Safety

▸ Environmental

▸ Occupational Safety

▸ Radiation Safety

Online



Online

EH&S Training Available Online!

EH&S is offering training courses online through the Blackboard e-Education platform.

To view the courses that are available, or to take a class online:

1. [Log into BLACKBOARD](#)
2. Click on the "Courses" tab.
3. Click on "Environmental Health & Safety" in the Course Catalog.
4. Click on the down arrow (V) after the Course ID to "Enroll" in the class.

The online course can also be used to review the course material after you have taken the live class, or to take the annual refresher course, when required.

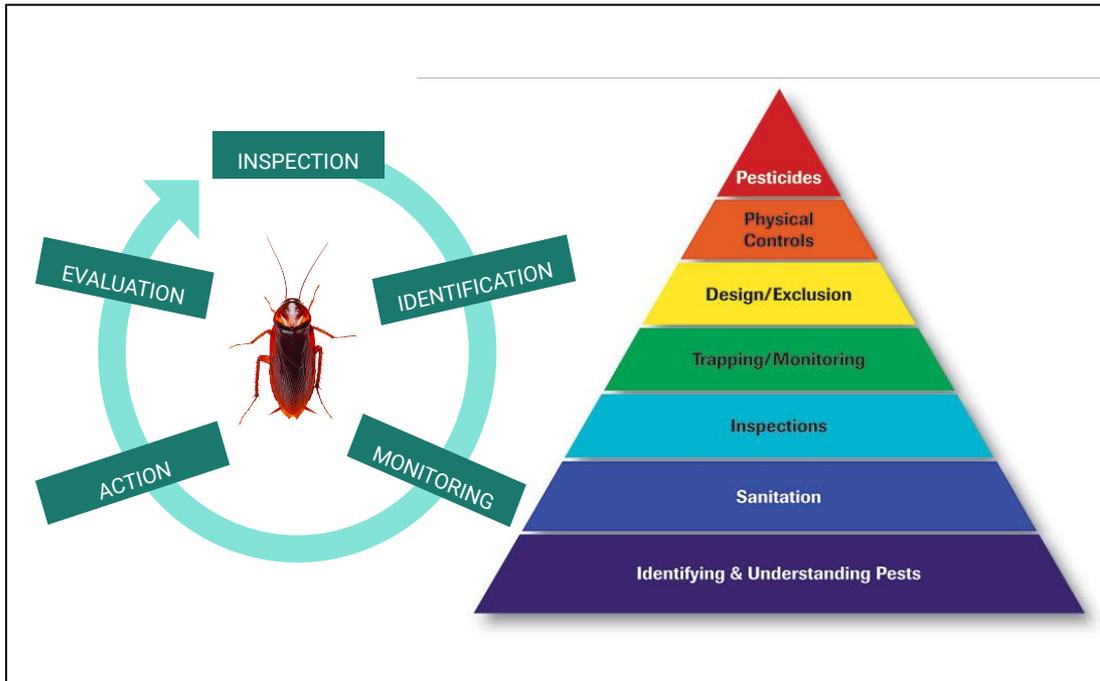
A note about training...

Supervisors, including laboratory PI's, are responsible for ensuring that employees receive the necessary safety training based on the work that their employees perform.

Online training provides the same "credit" that you get when you attend the "live" classroom version!



Integrated Pest Management (IPM)



IPM promotes safe, least-toxic solutions to both pest and pesticide problems.

Stony Brook is required to implement an Integrated Pest Management (IPM) process as part of the pest control and pesticide management program.

IPM focuses on prevention, combining techniques and using the least toxic products and methods for controlling pests.

The IPM Process involves:

- **Inspections** - look for sources of food, water and how pests are getting in.
- **Identification** - must identify and understand the target pest before taking action.
- **Monitoring** - used to identify pests and determine extent of problem.
- **Action** - eliminate conditions that allow pests to thrive.
- **Evaluation** - Follow-up

The IPM Pyramid identifies steps to take to take before using pesticides. Good sanitation will help to remove food, water and shelter for pests. Keeping doors and windows closed, fixing screens, and sealing penetrations will help to prevent pests from entering the indoor environment.



Pesticide Management

IT'S THE LAW!

- NYSDEC Registered Pesticide Agency
- Certified/Trained Applicators
- Label/Equipment Requirements
- Pesticide Restrictions
- Recordkeeping



It is unlawful for anyone to apply pesticides at any university property. Applications are only permitted by EH&S licensed personnel and approved contract exterminators.

The New York State Department of Environmental Conservation (DEC) regulates pesticides and is responsible for enforcement of the requirements in the Environmental Conservation Law.

Stony Brook University is Registered Pesticide Agency and must comply with pesticide regulations 6 NYCRR - Part 325.

Pesticide applicators must be trained and certified before they can apply pesticides, and they must follow strict requirements for the selection and use of pesticides. Records have to be maintained and reported annually to the DEC.

Individuals may not purchase or bring pesticides to work, and must not apply pesticides in any Stony Brook University facility.



Prevent and Report Pest Problems

Main Campus, HSC, BST, R&D Park

- EH&S Website:
ehs.stonybrook.edu/services/pest-management

Campus Residences and Southampton

- FIXIT Website: stonybrook.edu/fixit/

Healthcare Facilities: Call Housekeeping (631) 444-1460

LISVH: Call Environmental Services (631) 444-8790



Good sanitation will help to remove sources of food, water and shelter for pests to live and breed in.

Pest control services are provided by different service providers, depending on your location. The proper contact information can be found on the [EH&S Pest Management](#) website.

Here are a few things that you can do to help prevent pest infestations:

- Store food in a sealable container, preferably in a refrigerator.
- Keep doors and windows closed.
- Report any open penetrations you find.
- Keep your work area and break rooms clean.
- Clean refrigerators, appliances and areas where food is stored or served.
- Empty your garbage can into a central trash receptacle at the end of each day.
- Tie your garbage bag closed if it can not be removed.
- Recyclable bottles and cans should be rinsed before disposal.



Environmental Health and Safety
Stony Brook University
110 Suffolk Hall
Stony Brook, NY 11794-6200
Tel: (631) 632-6410
Fax: (631) 632-9683
E-mail: ehsafety@stonybrook.edu
<https://ehs.stonybrook.edu/>