

Wyss Institute Emergency Action Plan



July 2018

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LIST OF ABBREVIATIONS AND ACRONYMS

BIDMC	Beth Israel Deaconess Medical Center
BU	Boston University
BWH	Brigham and Women's Hospital
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code Of Federal Regulations
CHB	Children's Hospital Boston
CLS	Center for Life Science - Boston
CMR	Code of Massachusetts Regulations
DFCI	Dana-Farber Cancer Institute
EAP	Emergency Action Plan
EC	Emergency Coordinator
EH&S	Environmental Health and Safety
EMS	Emergency Medical Service
EPA	U.S. Environmental Protection Agency
ERG	Emergency Response Guide
HAZWOPER	Hazardous Waste Operations and Emergency Response Standard
HMS	Harvard Medical School
HUPD	Harvard University Police Department
LEMT	HMS Local Emergency Management Team
MADEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
MGH	Massachusetts General Hospital
MIT	Massachusetts Institute of Technology
SDS	Safety data sheet
MWRA	Massachusetts Water Resources Authority

CONTACT INFORMATION

Name/Title	Phone Number	E-mail
University Operations 24/7 (spills, releases, exposures)	617-495-5560	
Simonetta Piergentili, Cambridge Operations	617-852-1578	sim.piergentili@wyss.harvard.edu
Troy Leonard, Associate Director, Facilities & Planning	617-840-6859	Troy.leonard@wyss.harvard.edu
Mike Carr, Lab Manager	203-710-4224	Michael.Carr@wyss.harvard.edu
Bob Rasmussen, Director of Research Operations and the Biosafety Officer	617-935-9188	Robert.rasmussen@wyss.harvard.edu
Occupational Health Departments: Harvard University Health Services: Longwood Harvard University Health Services: Cambridge Children's Hospital Boston (CHB) Beth Israel Deaconess Medical Center (BIDMC) Dana-Farber Cancer Institute (DFCI) Boston University (BU) Massachusetts Institute of Technology (MIT) Massachusetts General Hospital (MGH) Brigham and Women's Hospital (BWH)	617-432-1370 617-495-5711 617-355-7580 617-632-0710 617-632-3016 617-353-6630 617-253-8552 617-726-2217 617-732-6034* or 617-732-8501	
University of Massachusetts Medical School: Employee Health University Campus Employee Health Memorial Campus Employee Health 210 Lincoln Street	774-441-6263 508-334-6238 508-793-6400	
Harvard University Police Department (HUPD)	617-432-1212	
Lockouts/Escort Service	617-432-1379	
Facility Emergency (flood, leak, building, damage, etc.)	617-735-4399	
Poison Control	1-800-682-9211	
Chemical/Biological/Radiation Spill	617-495-5560	
BioMed Realty Trust, Inc. (BMR) Security	617-232-0102 or 617-202-8957	
Hazardous Material Emergency Response Contractor: Triumvirate Environmental.	800-966-9282	
Biological Waste/Sharps pickup	617-632-7243	
Able Engineering Services (Building Maintenance)	617-735-4399	

EMERGENCY HOSPITALS

Longwood: Brigham and Women's Hospital (BWH), Beth Israel Deaconess Medical Center (BIDMC), Boston Medical Center, Mass General Hospital (MGH)

Cambridge: Mount Auburn Emergency Hospital, Cambridge Health Alliance (CHA), MGH, MIT Medical, Harvard University Health Services – Pound Hall (24/7 Urgent Care)

Note: For University of Massachusetts Medical School, MGH and BU affiliated personnel, patients should be taken to the nearest available hospital if necessary.

1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this Emergency Action Plan (EAP) is to provide the [Wyss Institute](#) for Biologically Inspired Engineering at Harvard University (Wyss) with a single guidance for emergency preparedness and response. The purpose of this EAP is:

- To act as a guide during actual emergency situations;
- To familiarize local emergency response personnel with the types of material handled and internal emergency response procedures;
- To prevent or minimize hazards to human health and the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous materials to the air, soils, or surface waters.

1.2 SCOPE

The Wyss is located at multiple facilities:

1. 1st, 2nd and 5th floors of the Center for Life Science (CLS) Building at 3 Blackfan Circle, Boston.
2. 1st and 2nd floors of Engineering Sciences Lab (ESL) at 58 Oxford Street, Cambridge
3. 3rd and 4th floors of 60 Oxford Street, Cambridge.

This EAP establishes specific emergency responses for the Wyss Institute. The emergency response will include facility personnel, outside resources, and the municipal offices to establish the response for each potential spill at the facility. The following regulations may apply due to the nature of the emergency:

310 CMR 30.351 (9)	Small Quantity Generator Requirements
310 CMR 30.520 – 524	Contingency Plan, Emergency Procedures, Preparedness and Prevention
29 CFR 1910.38	Emergency Action Plans
29 CFR 1910.120	Hazardous Waste Operations and Emergency Response Standard (HAZWOPER)
310 CMR 40.0000	Massachusetts Contingency Plan (MCP)
40 CFR 302.4 – 302.6	Comprehensive Environmental Response Compensation and Liability Act (CERCLA): Reportable Quantities and Notification Requirements

The Code of Massachusetts Regulations (CMR) is available online at <http://www.lawlib.state.ma.us/source/mass/cmr/index.html>.

The Code of Federal Regulations (CFR) is available online at

1.3 LOCATION AND DISTRIBUTION OF PLAN

A copy of this EAP will be maintained in the following locations, and is available for inspection upon request:

- [Wyss External Website](#)
- Wyss Internal SharePoint
- Entrance to the main labs

Copies will also be made available to any local emergency management agencies that become involved in an on-site emergency.

1.4 EAP UPDATES AND AMENDMENTS

The EAP will be reviewed and immediately amended whenever:

- There are regulatory changes requiring amendment to the EAP.
- The plan fails in an emergency.
- The facility or the materials within the facility (raw materials, waste, equipment, etc.) change so as to increase the potential for fire, explosion, or release of hazardous materials, hazardous waste, or hazardous waste constituents.
- The list of emergency contacts/coordinators and/or responsible personnel changes.
- There are any substantial changes in the operations and/or maintenance of the facility.
- Any other events that occur and warrant an EAP amendment or update.

2.0 SITE DESCRIPTION

The Wyss facilities are designed, constructed, maintained, and operated to prevent and to minimize the possibility of any threat to the public health, safety, or welfare, or the environment from a fire, explosion, or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.

The Institute is a non-profit 501(c)3 at Harvard University. Its operations and all aspects of its activities are conducted in accordance with Harvard's rules, policies, procedures and ethical standards and the applicable decisions of the Provost, President and governing boards of Harvard, and under Harvard's oversight exercised through the Institute's Board of Directors. To accomplish its mission and goals, the Wyss and Harvard collaborate with Harvard's affiliated hospitals and other academic and clinical institutions.

CLS Building: The site is comprised of the entire fifth floor, which consists of approximately 50,500 square feet of wet laboratory and general use space, 31,500 square feet on the second floor, consisting of laboratory and general use space as well as a machine shop and 8,800 square feet on the first floor, consisting of general use space. The facility is located at 3 Blackfan Street, Boston, Massachusetts.

The fifth floor of the facility is leased from BIDMC; the facilities are managed by Able Engineering Services, building security is managed by the Biomed Realty (BMR) security team, and Wyss security is managed by the HUPD. The first and second floors of the facility are leased directly by the Wyss from BMR, and facilities and security responsibilities are the same as on the fifth floor. The Wyss maintains its own U.S. Environmental Protection Agency (EPA) Identification Number, generator status, and individual responsibility for generation, handling, and disposal of hazardous waste.

ESL, 58 Oxford Street, Cambridge: The site is comprised of the entire 1st floor and portions of the 2nd floor, consisting of mostly wet laboratory space with a minimum of dry office space. The space is leased from the School of Engineering and Applied Sciences (SEAS) at Harvard.

60 Oxford Street, Cambridge: The site is comprised of portions of the 4th floor, consisting of dry labs, machine shops, and general use space, and a conference room on the 3rd floor. The space is leased from the School of Engineering and Applied Sciences (SEAS) at Harvard.

3.0 FACILITY EAP/CONTINGENCY COORDINATORS

The following paragraphs briefly describe the emergency response roles and general responsibilities that are employed for on-site personnel at the Wyss. Other personnel without specific safety designations should remember that safety is everyone's responsibility and should tailor their actions and decisions accordingly. In addition, local emergency response agencies and emergency response contractors are on call to assist in the event of an emergency.

3.1 DESCRIPTION OF RESPONSIBILITIES

3.1.1 CLS Only: Incident Coordinator

The CLS Incident Coordinator (IC) oversees implementation of the Wyss EAP both during emergencies and throughout the year. The IC or designee directs the Evacuation Monitors (EMs) and staff in the event of an on-site emergency. The IC has the responsibility and authority to activate the facility EAP based on the level, magnitude, and circumstances of an incident.

Primary Incident Coordinator: Michael Carr, cell: 203-710-4224; office: 617-432-8234

Secondary Incident Coordinator: Troy Leonard, cell: 617-840-7036; office: 617-432-7036

Responsibilities include:

- Implementing the EAP during any on-site emergency. This includes activating internal facility alarms (except for Fire Alarms, which can be activated by all personnel) to notify personnel of emergency conditions.
- Assessing the need for and initiating evacuation in situations where evacuation is not automatic.
- Maintaining and testing emergency equipment (e.g., eyewash stations, and safety showers). Other emergency equipment is maintained by Able Engineering Services.
- Reviewing and updating the EAP.
- Handling all communications with local emergency response agencies and emergency response contractors/consultants, as necessary.
- Notifying all appropriate local, state, or federal agencies and Building Management Personnel of an on-site emergency.
- Assessing the potential hazards to human health, safety, or welfare, and to the environment that result from an on-site emergency. The assessment will include the direct and indirect effects of the spill, fire, explosion, or release, including the effects of any hazardous material from fire suppression efforts, such as surface water run-off.

- Taking all reasonable measures to ensure that a release does not spread, recur or result in fires, etc.; this may include halting on-site operations.
- Providing for the proper storage and/or disposal of any recovered waste, ensuring that all affected emergency equipment is cleaned and fit for use, and conducting post-emergency assessments after each emergency.

Harvard EH&S personnel are available for all emergencies by calling the Harvard University Operations at 617-495-5560.

All ICs are required to review this EAP and to become familiar with the layout and operations at the Wyss facility. Incident coordinators must also know the location of the Main Accumulation Area (MAA), the location of all relevant policies, procedures, and records, and be familiar with the types of hazardous waste generated at the facility.

3.1.2 CLS Only: Evacuation Monitors

Evacuation Monitors (EM) include representatives from all areas of the building. Personnel rosters are maintained by Operations and updated documents are distributed to the EMs and to the IC. In general, personnel chosen for this role have positions that require them to be regularly present in the building during working hours. Alternates must be selected for all EMs. EMs will receive training that includes evacuation procedures.

Responsibilities of the EM include:

- Identifying and informing the Incident Coordinator, Incident Coordinator Alternate, and the Director of Operations of all disabled individuals (including temporarily disabled) in their assigned area, assigning capable department representatives to aid in their evacuation, and identifying evacuation procedures for those employees.
- The first EM is to lead occupants during any evacuation out of their respective area.
- The second EM is to sweep their respective area and direct occupants out of the building who may be in that area.
- Look for any emergency strobes, lights, exit signs, or areas where the alarm is not audible. Make a note of the issue for the IC when the emergency is in control.
- Notify Wyss IC if any employees in their assigned area may still be in the building.

Each laboratory/office will assign an employee to assume the role of the EM.

3.1.3 CLS, ESL, 60 Oxford Street Wyss Personnel

This [Emergency Evacuation Fact Sheet \(Appendix A\)](#) details the critical responsibilities of all Wyss personnel.

3.2 EXTERNAL, RESPONDING AGENCIES

The role of an external responding agency is to respond to incidents requiring equipment and materials not available at the Wyss, or to assist the internal direct responders with releases of large quantities of hazardous materials.

For fire and medical emergencies, call 9-911 from an internal phone (911 from cell if internal is not possible), this will minimize the amount of time it takes for emergency responders to arrive.

Once the fire response is on its way, notify HUPD at 617-432-1212.

Third Party Responders are contacted by the Wyss IC or designee. Third party responders are equipped to handle the containment and cleanup of serious and/or major spills (i.e., Level A or B responses requiring supplied air respiratory protection). Triumvirate Environmental, Inc. provides this service.

3.3 SITE SECURITY AND CONTROL

3.3.1 CLS

To prevent unauthorized personnel from entering the Wyss, CLS has full time security that visually checks all badges before anyone enters the building. The Wyss Institute's main lobby on the 2nd floor also has a designated employee, Receptionist, to check people in and act as another layer of security. All visitors must check in with building security on the 2nd floor of CLS, as well as check in with the Wyss Receptionist.

The 2nd floor of the Wyss facility is open Monday – Friday 8:30 am – 5:00 pm. The 5th floor main doors are open Monday – Friday 7:00 am – 5:00pm. Only employees/researchers who have Wyss ID cards have access to the facility beyond those hours. The first floor is accessed only with a Wyss ID card.

3.3.2 ESL

To prevent unauthorized personnel from entering the Wyss, the building requires special access during non-business hours, and the labs require special access at all times. This access is added to Harvard ID cards upon request. All visitors must be escorted by a Wyss employee.

3.3.3 60 Oxford Street

To prevent unauthorized personnel from entering Wyss space, 60 Oxford Street has full time security that visually checks all IDs before anyone enters the building. All visitors must receive a visitor's badge from security and be escorted by a Wyss employee. The Wyss facility is open Monday – Friday 8:30 am – 5:00 pm. Beyond those hours, the doors are locked and only staff/researchers who have requested special access on their HUID cards can enter.

4.0 EMERGENCY RESPONSE – GENERAL

All Wyss personnel required to complete the online Wyss Emergency Evacuation training module through the [Harvard Training Portal](#). In all emergencies the primary objectives for employees are to notify the appropriate emergency responders and, when appropriate, move to a safe location. Employees who use hazardous materials are trained in proper handling and basic spill response procedures. The building owners will schedule and administer periodic fire drills.

Lab personnel are trained and prepared to respond to emergencies that may occur in the lab environment. These emergencies may include, but not limited to:

- Accidents and injuries, especially those that may result in exposure to hazardous chemicals.
- Spills of hazardous chemicals and biological materials.
- Radiation spills.

4.1 INFORMATION AND EMERGENCY NUMBERS

All Wyss personnel have been instructed in the use of the Emergency Response Guide (ERG) flipcharts or trifolds, which are posted throughout labs and office areas. These resources contain the appropriate emergency phone numbers organized by category of emergency. See Appendix B for [emergency contacts](#).

4.2 NOTIFICATION

When Wyss personnel reports an incident requiring BFD or medical response, they have been instructed to also call HUPD at 617-432-1212 or 617-495-1212 from a safe location and provide the following information:

- Identity of the caller
- Contact phone number
- Location of the incident (building and room number)

- Type of incident

The person who reported the incident is instructed to stay at the safe location until a representative from the Facility Management group, the Wyss EH&S Office, HUPD, or Security Department arrives to the scene.

Lab personnel shall report every incident/accident (e.g., chemical spill, medical injury, accident resulting in damage to instruments or property, etc.) and “near miss” (incident/accident in which a chemical spill, medical injury, and/or property damage was barely avoided) to Wyss EH&S and complete Harvard University’s online [Accident Reporting Form](#). In the event of an incident/accident that results in injury, lab staff will seek medical attention from the nearest hospital or Harvard University Health Services. In addition, lab personnel shall report situations or conditions that have the potential for causing an incident/accident to Wyss EH&S.

Lab personnel reporting an emergency must submit complete Harvard University’s online [Accident Reporting Form](#) as soon as possible. The form is available from Wyss or Harvard EH&S. All incidents/accidents and/or near misses are reviewed by Wyss EH&S, Facilities, and/or other parties involved, with the goal of identifying and disseminating corrective and preventative actions.

In the case when the emergency goes beyond the property’s boundaries, HMS Local Emergency Management Team (LEMT) will notify the local fire department, which serves as the Local Emergency Planning Committee (LEPC).

5.0 ENGINEERING CONTROLS, WORK PRACTICES, EMERGENCY RESPONSE EQUIPMENT

5.1 ENGINEERING CONTROLS

Detailed specifications for hazardous materials storage and standard operating procedures for their use and handling can be found in the Wyss Chemical Hygiene Plan (CHP) and Safety Data Sheets (SDSs), which are available on the [Wyss website](#).

5.2 SAFE WORK PRACTICES

Personnel are expected to adhere to established safe work practices for their respective specialties. Work at the facility is conducted according to established protocols and guidelines for the safety and health of all involved. Detailed work practices are included in the Wyss CHP and Biosafety Manual. General safe work practices include the following:

- Exits are clearly marked. Emergency phone numbers and evacuation plans are posted. The fire department has been notified and will be updated on the type, quantity, and locations of hazardous materials stored on-site.
- Alarms and communication systems have been installed to notify on-site personnel of any emergency. In addition, a communication system with at least one backup has been installed for contacting police, fire, ambulance, or the Emergency Responders.
- In the event of a hazardous materials spill, no personal protective equipment (PPE) is 100% effective, and all personnel must minimize contact with hazardous materials. Plan work areas and procedures accordingly. Do not place PPE on surfaces that may be potentially contaminated.
- Smoking, eating, or drinking in any potentially contaminated area is not allowed. Oral ingestion of contaminants is the second most likely means of introducing toxic substances into the body (inhalation is the first).
- Personnel must be aware that chemical contaminants may mimic or enhance symptoms of other illnesses or intoxication.
- Wyss and Harvard EH&S will maintain an incident database. These records become part of a permanent file.

5.3 EMERGENCY RESPONSE EQUIPMENT

Spill control, PPE, communication, fire control, power control, eyewashes, safety showers, first aid kits and SDSs are provided and maintained throughout the Wyss facilities.

5.3.1 Spill Kits

Universal and chemical spill kits are kept in areas of hazardous material use or storage; the locations are indicated with a sign and must remain unlocked at all times. Spill kits are inspected monthly and re-supplied as necessary.

5.3.2 Personal Protective Equipment

Anyone responding to a hazardous materials emergency must be protected from the potential hazards. The purpose of PPE is to shield or isolate individuals from the chemical, physical, radioactive and biological hazards that may be encountered during an emergency response. Careful selection and use of appropriate PPE and response equipment protects the respiratory system, skin, eyes, face, hands, feet, head, body, and ears. When new products or chemicals are selected for use at the facility, the SDS is used to determine proper PPE. Refer to the Wyss CHP, Biosafety Manual, and [Harvard Radiation Safety Manual](#) for further information about the proper selection of PPE.

5.3.3 Fire Rated Stairwells

The Wyss facilities have multiple fire rated stairwells. These stairwells act as a safe haven until trained responders arrive to perform rescue activities.

5.3.4 Sprinkler System

A wet sprinkler system is used throughout the Wyss facilities. For this type of sprinkler system, the parts are filled with water at sufficient pressure to provide an immediate continuous discharge if the sprinkler system is activated. All sprinkler heads must have 18 inches of clearance in order to operate as designed.

5.3.6 Fire Extinguishers

ONLY USE A FIRE EXTINGUISHER IF IT IS THE ONLY MEANS OF ESCAPE.

Class ABC fire extinguishers are located throughout the Wyss facilities. This type of extinguisher can be used in trash, wood, paper, flammable liquids and electrical fires. The locations are indicated with signage and must remain unlocked at all times.

5.3.7 Utility Controls

The utility control switches for CLS Wyss are located on the 5th floor in Corridor 05C9, near the service elevators and are controlled by the building owner, BI. Harvard facilities for the ESL and 60 Oxford Street buildings have access and control all utilities.

5.3.8 Eyewash and Safety Shower Stations

Eyewash and safety shower stations are located throughout the facility and clearly indicated with signage. They must remain unlocked, unobstructed and accessible at all times. Wyss EH&S maintains this equipment at CLS. At ESL, facilities staff flush these systems quarterly and document it on the tag. The lab safety officers flush the eye wash stations weekly.

5.3.9 First Aid Kits

First aid kits are provided throughout the Wyss facilities and are inspected and restocked monthly. They must remain unlocked, unobstructed and accessible at all times.

5.3.10 Safety Data Sheets (SDSs)

SDSs advise the level of protection necessary to safely work with a chemical. Researchers receive SDS for every chemical they order. The IC will use this reference and other sources of information (i.e., manufacturer's literature) as a guide to determining the level of protection that response personnel will employ when responding to a release.

5.3.11 Respirators

No Wyss personnel will use respirators to respond to an incident. Only employees trained and medically evaluated in the selection and use of respirators per 29 CFR 1910.134 may use respirators. For additional information regarding respirator use, contact EH&S or see Harvard's [Respiratory Protection Program](#).

6.0 EMERGENCY/CONTINGENCY PROCEDURES

This section identifies the emergency contingency procedures undertaken for operations at the Wyss. Other sections provide further information to be used under emergency conditions.

6.1 LINES OF AUTHORITY

The Incident Coordinator from the Wyss has primary authority for directing site operations under initial emergency. The local PD or FD assumes primary authority for directing site operations under emergency conditions when they arrive on the scene. All communications both on- and off-site are directed through the PD and FD, in coordination with the Emergency Planning and Coordination of Cambridge and the Emergency Planning Committee of Boston.

6.2 CLS BUILDING EVACUATION

A visual alarm will flash at the location in the building. A steady horn will sound, after the horn a pre-recorded announcement will play. The message will play three times. Evacuate the building only if a slow “whoop” tone is played after the message.

The evacuation of a high rise building (anything over seven stories in Boston) there are special procedures. For most emergencies, there will only be three floors evacuating, the floor where the emergency is occurring and the floors above and below the emergency. For example, if the issue occurs on the 5th floor, the 4th, 5th, and 6th floors will evacuate. All remaining floors and all remaining employees will shelter in place and await further instruction.

For details of employee, EM, and IC responsibilities and procedures in the event of a building evacuation, see [Evacuation Procedure](#) in Appendix D that is handed out to all EMs. See Appendix C for [CLS evacuation routes, emergency exits, and assembly points](#).

6.3 ESL (58 OXFORD STREET, CAMBRIDGE, MA) EVACUATION

All Wyss personnel are trained to exit the building immediately and report to the designated assembly point during a building evacuation. There are no designated Evacuation Monitor (EMs) and the local fire department is responsible for sweeping the building to ensure everyone has evacuated. For more details on ESL building evacuation, see [Appendix E](#).

6.4 60 OXFORD STREET, CAMBRIDGE, MA EVACUATION

All Wyss personnel are trained to exit the building immediately and report to the designated assembly point during a building evacuation. Simonetta Piergentili and Tom Blough are the

Evacuation Monitor (EMs) who initially sweep the 3rd and 4th floors, the local fire department is the designated IC and responsible for sweeping the building when they arrive to ensure everyone has evacuated. For more details on ESL building evacuation, see [Appendix F](#).

6.5 FIRE EMERGENCIES

6.5.1 Employee Procedure

In the event of a fire, smoke or similar emergency, all personnel shall conduct the following:

- Notify personnel in the immediate area to evacuate.
- Activate the closest fire alarm.
 - Red fire alarm pull boxes are typically located near stairwells and exit doors. Activating the pull box automatically notifies the municipal emergency response team (fire/rescue). Activating the pull box activates horn/light combination units alerting all personnel to evacuate the building.
- Only attempt to fight a fire if it is blocking the only means of escape.
- Evacuate the building and proceed to the designated Assembly Points outside the building.
- Stay at the Assembly Point and notify EMs or IC anyone who may need assistance or may be missing.

6.5.2 Clothing on Fire

- Immediately drop to the floor and roll.
 - In case of ignition of another person's clothing, immediately assist that person to the floor and roll that person around to smother the flames.
- Safety showers are of secondary importance. They are to be used only when immediately at hand. Rolling on the floor smothers the fire and helps keep flames out of the victim's face, thereby reducing inhalation of smoke.
- Once the fire is out, call 911 and 617-432-1212 immediately to obtain medical attention for the victim. Never attempt to remove clothing from a burn victim.

6.6 LAB EXPLOSION/VIOLENT REACTION

Lab personnel shall observe the following procedures in the event of an unexpected, violent chemical reaction within a fume hood, the conditions of which may worsen and/or terminate with an explosion or fire:

- When a chemical reaction appears to be "out of control," immediately pull the hood sash closed, if possible to do so safely.

- If possible to do so safely, shut off energy sources (e.g., electricity, flame, steam, or gas cylinder).
- Notify all personnel in the immediate area to evacuate the area.
- Evacuate the area and call 911, and University Operations at 617-495-5560.

6.7 EMERGENCY MEDICAL RESPONSE

This section outlines the response to medical emergencies (i.e. medical conditions that require immediate professional medical attention). There are two general categories of medical emergencies:

6.7.1 Life threatening Emergency

Life-threatening medical emergencies include loss of consciousness, possible broken bones, suspected poisoning, severe bleeding.

- Dial 911 and have a colleague notify HUPD at 617-432-1212 providing as many details as possible. This is essential to escort emergency responders to the incident location.
- Alert everyone in the area, secure the area and stay with the victim to keep them calm.
- If chemical exposure is involved collect the appropriate [Safety Data Sheet \(SDS\)](#) for EMS personnel or provide them with the chemical name.
- Notify the supervisor and complete the Wyss Incident Report Form and Harvard University's online [Accident Report Form](#).

As necessary, administer first aid and/or CPR if trained. If possible to do so safely, assist the victim with removing clothing contaminated with hazardous materials. Never try to remove clothing from a burn victim.

6.7.2 Non-life threatening Emergency

Non-life threatening medical emergencies are those that require medical attention but do not pose an immediate risk to the victim's life. When a medical emergency occurs, the person(s) discovering the situation should respond as follows:

- Notify EH&S at University Operations, 617-495-5560 and provide details (including location) of the incident and follow their instructions.
- Trained personnel will respond with a first aid kit.
- Do not leave the location of the incident to prevent further injury.
- Gather [SDS](#)'s in the event a chemical is involved.

- Receive necessary first aid.
- For any follow-up treatment, EH&S can provide contact information for occupational health services.
- Notify the supervisor and [Wyss EH&S](#), complete the Incident Report Form and Harvard University's online [Accident Reporting Form](#).

6.8 HAZARDOUS MATERIAL SPILLS

The priority of any hazardous spill response is to prevent employee exposure and to prevent ignition of flammable material. Secondary considerations include preventing material from entering the environment, minimizing property damage, and reducing downtime.

Under no circumstance should anyone attempt to clean up a hazardous material spill without the proper training and PPE, or if they do not feel comfortable.

- For unknown spills, notify and evacuate everyone in the lab, prevent access and call 24/7 Emergency Response: 617-495-5560
- For biological spills, refer to the [Wyss Biological Safety Manual](#).
- For chemical spills, refer to the [Wyss Chemical Hygiene Plan](#).
- For radiation spills, refer to the [Harvard Radiation Safety Manual](#).

6.9 SKIN OR EYE HAZARDOUS MATERIAL EXPOSURE

Lab personnel shall observe the following procedures in the event of skin contact with a hazardous material. If an extremely toxic chemical (e.g., sodium cyanide) or a material of unknown toxicity is involved, personnel must take precautions to avoid exposure to the material, such as donning personal protective equipment, before attempting to help the victim.

6.9.1 Eye Wash Stations

If a hazardous material has been splashed in the eyes locate the nearest eye wash station. Use the following procedures to effectively use the eye wash stations:

- Pull down the emergency eye wash lever to activate the eye wash station.
- Flush the eyes with water for at least 15 minutes to rinse eyes completely.
 - During flushing hold open the affected eyelids to ensure all areas of the eyes are drenched.
- A coworker shall call 911 and then Harvard University Operations at 617-495-5560 to seek additional first aid/medical treatment.
- Notify the supervisor and [Wyss EH&S](#) and complete the Wyss Incident Report Form and Harvard University's online [Accident Reporting Form](#).

6.9.2 Safety Showers

In the event of a significant chemical splash with exposure to skin employees are instructed to do the following:

- Remove affected clothing from the skin to reduce exposure potential.
- Activate the safety shower by pulling the handle completely down.
- Flush the affected areas for 15 minutes.
- A coworker call 911 and then Harvard University Operations at 617-495-5560. Medical attention may be needed to determine if additional treatment will be required.
- Notify the supervisor and [Wyss EH&S](#) and complete the Wyss Incident Report Form and Harvard University's online [Accident Reporting Form](#).

Note: Wyss's eyewash stations and safety showers are generally not connected to drains; large amounts of water can collect on the laboratory floor when eyewashes and showers are used. Personnel shall notify EH&S and Janitronics at 617-632-7243 (pager #90598) as soon as possible to aid in the cleanup, and post signs to notify others of the wet floor. Either Wyss or Harvard EH&S staff will determine if the water must be collected as hazardous waste.

6.10 WORK PLACE VIOLENCE

- Workplace violence is any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the Wyss. It ranges from threats, verbal abuse, physical assaults and even homicide.
- In the event where an individual experiences work place violence immediately contact Harvard Police, the supervisor, and Academic Affairs.
- In any event of work place violence, Harvard Police will address it immediately.

6.11 TRESPASSERS, BOMB AND TERRORIST THREATS

- Report any trespassers to security immediately to further handle the situation. Provide as many details as possible; they will contact local authorities if required.
- In the event a bomb or terrorist threat is received, immediately contact 911 and provide them with the following details:
 - Type of threat (written, verbal etc.)
 - Description and location of person or threat
 - When the threat occurred
 - Any witnesses and any other additional details
- Follow the IC instructions and evacuate the facility if asked to do so.

- Any detection, removal, or disarming of any explosive device or unstable container will be left up to local authorities whom are properly trained to handle such situations.

6.12 NATURAL DISASTERS

In the event of a natural disaster (i.e. blizzard, severe wind storm etc.) the Director of Operations will make decisions regarding evacuation or to cancel operations for the day. Any emergency evacuation notification will be provided through the building fire alarm system. In immediate emergency situations evacuations shall be conducted according to general evacuation routes and procedures.

APPENDIX A

EMERGENCY EVACUATION FACT SHEET

APPENDIX B

EMERGENCY CONTACTS AFTER HOURS EMERGENCY PROCEDURES

In the event of a chemical, radiological, biological spill or other lab emergency, call the 24/7 Harvard University Operations at 617-495-5560.

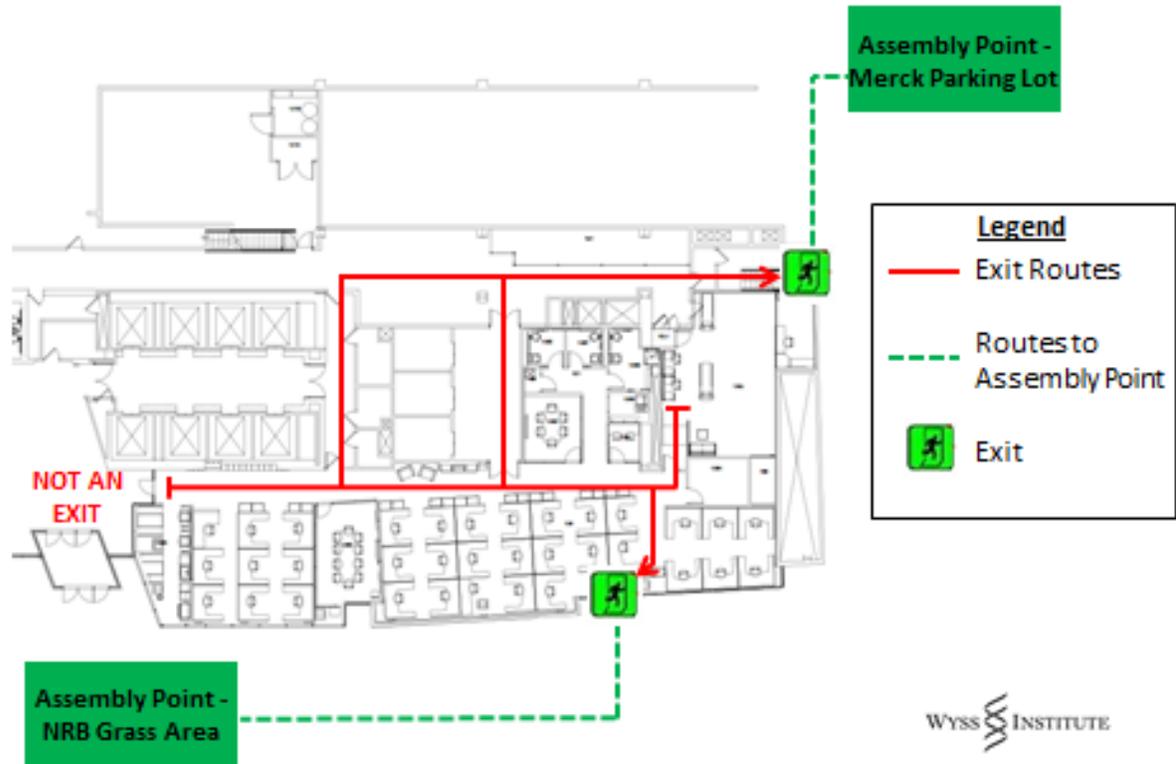
All other emergencies must be reported to Harvard University Police Department (HUPD) at 617-432-1212 (Longwood) or 617-495-1212 (Cambridge).

1. All reporting calls should be made from a safe location.
2. Operator will need to obtain the following information from the caller:
 - Caller Name
 - Phone Number
 - Caller's Present Location
 - Incident Location
 - Building Name
 - Floor
 - Room Number
 - Problem Description

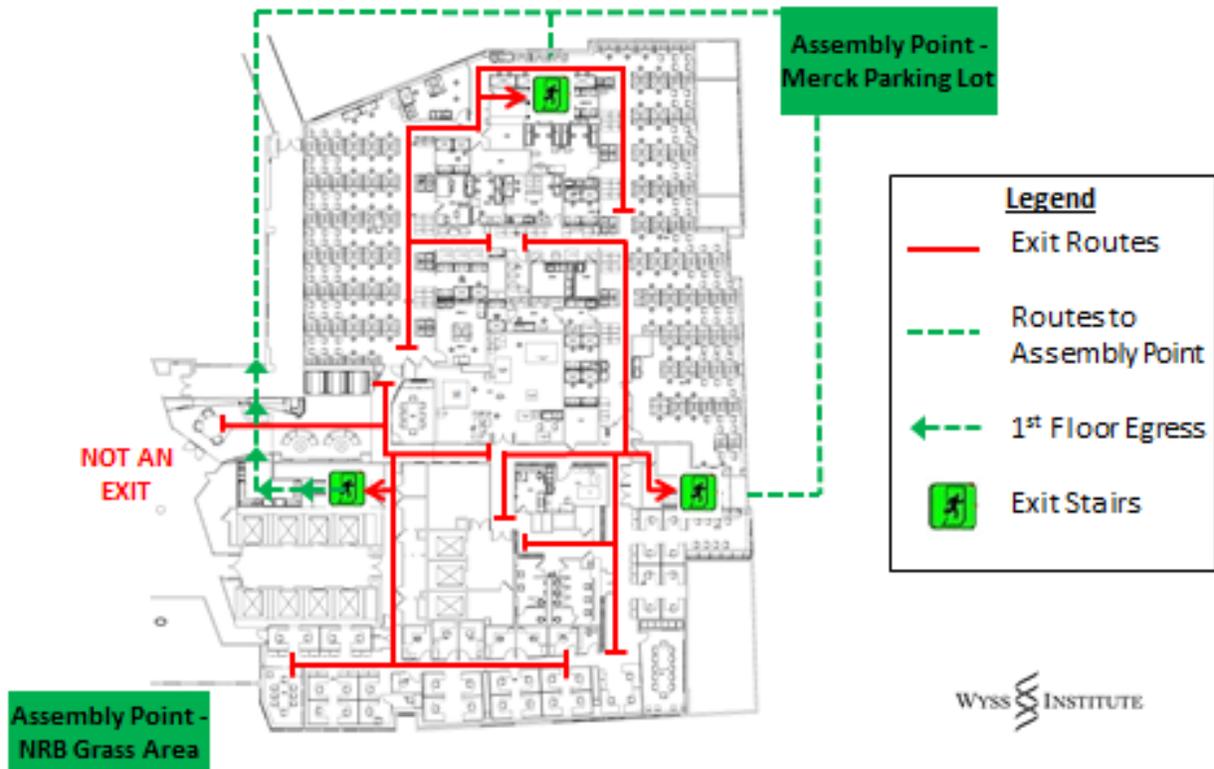
APPENDIX C

EVACUATION ROUTES AND EMERGENCY EXITS EVACUATION ASSEMBLY POINTS

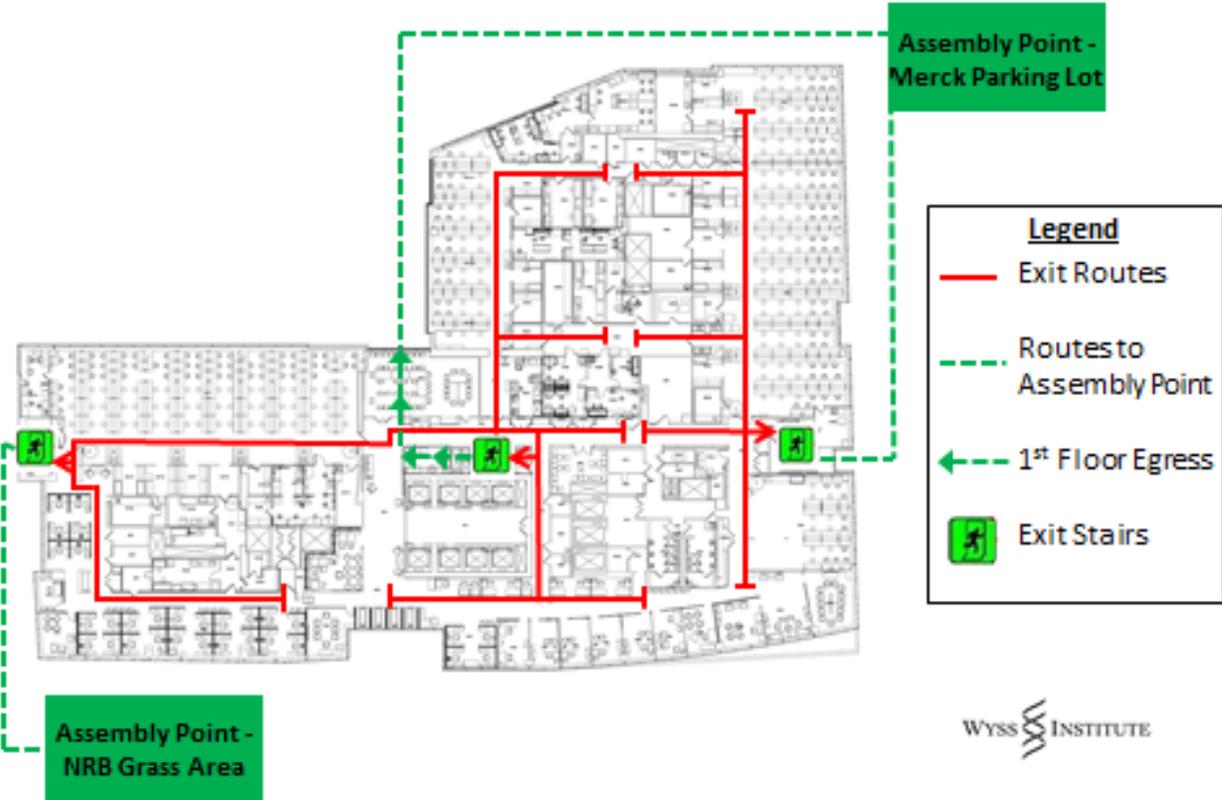
1st Floor Evacuation Routes



2nd Floor Evacuation Routes



5th Floor Evacuation Routes



APPENDIX D

CLS Building Evacuation Procedure

APPENDIX E

ESL (58 Oxford Street, Cambridge) Evacuation Procedure

APPENDIX F

60 Oxford Street, Cambridge Evacuation Procedure