



Emergency Response Group Manual For JABSOM June 2011

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**Emergency & Disaster Management at
JABSOM :
Emergency Response Group (ERG) Brief**

April 2011

W. Haning

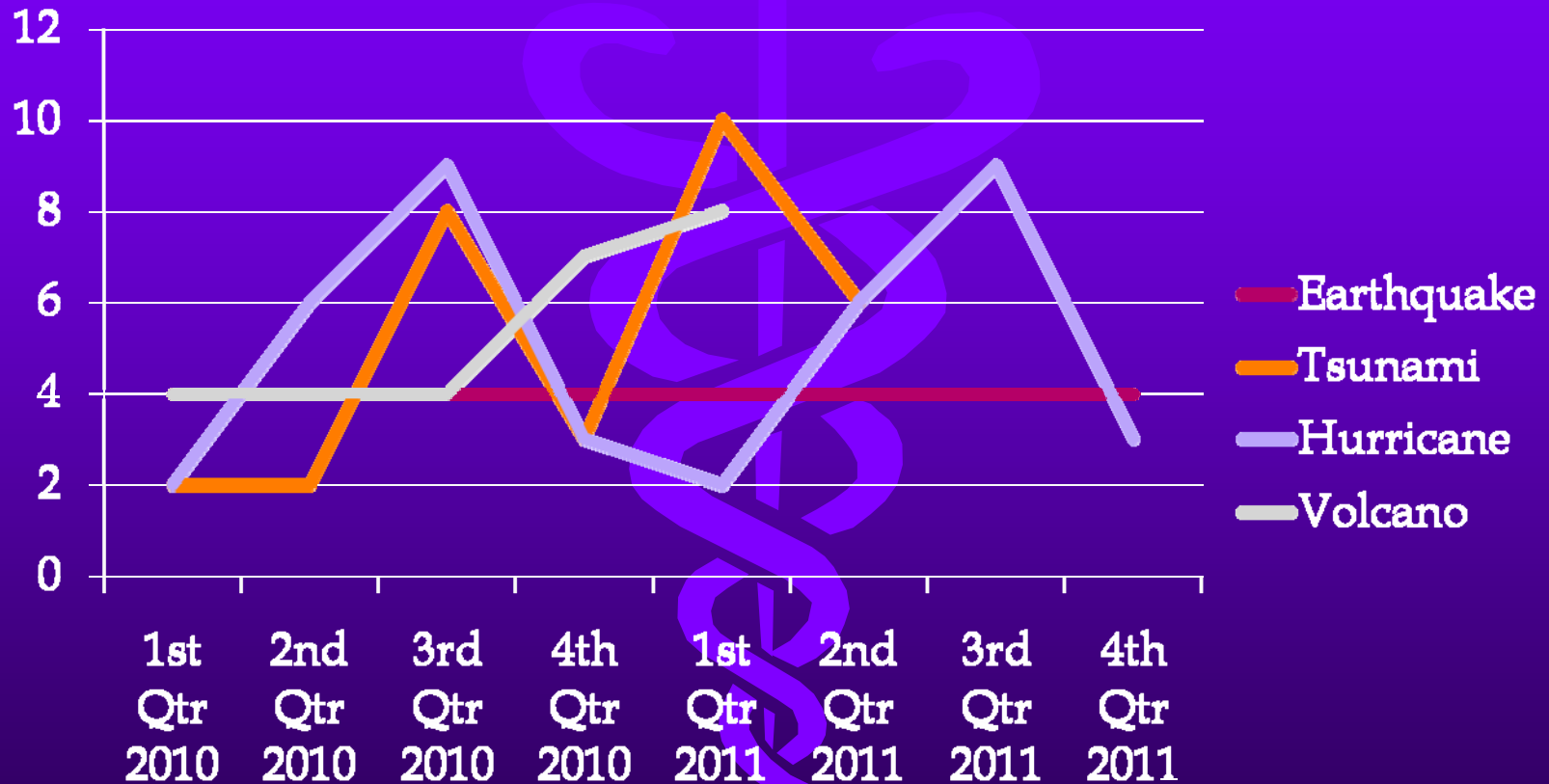
Briefing Content

1. Recent hazards to JABSOM
2. Preparation
 1. Timeline
 2. Existing Structure
 3. Disaster types
3. Training
 1. ICS
 2. Other
4. Readiness
 1. Directory & Manual
 2. Website - PIO. Presently, EHSO
<http://www.hawaii.edu/ehso/> (discussion)

Events

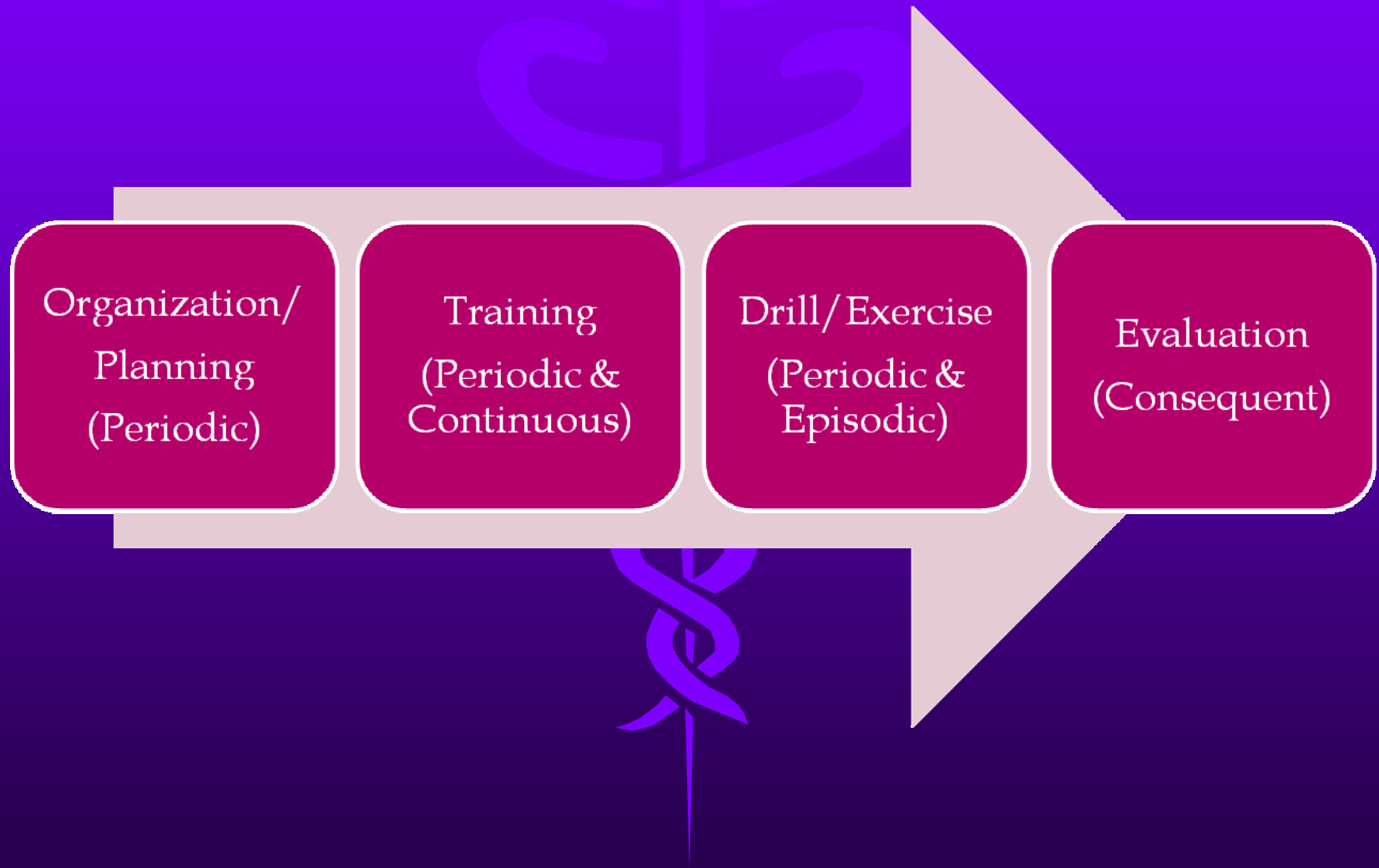
- 2010 Tsunami
- July 2010 – 3.5R event Oahu
- July 2010 – 4, 3-7.5R events off Indonesia and Luzon; no tsunami
- June-October 2010: Tropical Storm & Hurricane Season
- 11 March 2011 Fukushima earthquake & tsunami
- These are point-in-time events. Hazards may also be plotted over time and according to level/type of risk

Hazard Continuum



The hazards can be seen as: prevailing/periodic (hurricanes); prevailing/episodic (earthquake, volcano); and episodic (tsunami)

JABSOM EOC Timeline: Preparation Process



Emergency & Disaster Management UH

- System
 - President Greenwood
- Manoa
 - Chancellor Hinshaw
 - UH Manoa Emergency Management Team (EMT)
- Colleges/sites
 - Dean Jerris Hedges (EIC)
 - JABSOM MEB & BSB: EOC
 - Clinical and Operational Sites
 - Training centers
 - Biomed Bldg.

Classes of Incident

- **Point-in-time**
 - Flood
 - Fire
 - Earthquake
 - Conflict:
 - Hostage-taking, assault
 - Ballistic-Chem-Bio-Rad attack
- **Protracted**
 - Civil unrest
 - Epidemic
 - Famine
- **Complex**
 - E.g., Katrina – multiple “sub-disasters”
- **Disaster Analogy or non-material**
 - Loss of financial support, bankruptcy
 - Termination of mission by higher authority

Realms of Disaster

- **Geographic**
 - National/international
 - State-wide
 - Coastal
 - By island
 - Within campuses
- **Class**
 - Explosion/fire/CBNRI
 - Natural (volcanic), inadvertent
 - Terroristic (Propagative) & warfare, arson, infective
 - Organized and generalized (9/11)
 - Idiosyncratic (Columbine)
 - Inadvertent
 - Hurricane
 - Tsunami, other flooding
 - Civil unrest
 - Mass
 - Focal (hostage-taking)
 - Epidemic/pandemic
 - Delimited (anthrax)
 - Propagating (smallpox)

Organizational Array to Meet Disasters

- State and Island-specific CD: <http://www.scd.hawaii.gov/>
 - Healthcare Association of Hawaii (HAH) – consultative role, to hospitals and to State
 - Governmental agencies (C&C HNL ES, HFD, HPD, ARNG & ANG)
 - Dept. of Defense – inhibited by doctrine of *posse comitatis* but may participate in relief on invitation of the Governor and approval by the President
- Institutional planning
 - UH System
 - UHM
 - JABSOM
 - Training sites (hospitals)
 - MEB + BSB campus (Kaka’ako) [tested 19 APR 2011]
 - Biomed Bldg. at UHM
 - Leahi Hospital, other operational & research sites
 - Hospitals
 - Each must have a disaster response plan
 - Plans are tested Statewide periodically: EAS monthly (http://www.scd.hawaii.gov/documents/EAS_Plan.pdf), response Statewide annually or less frequently (Hazard Mitigation Plan: http://www.scd.hawaii.gov/2010_hmp.html)

Training

- Consistent process and replicable array of organizations: NIMS (National Incident Management System)
 - BDLS
 - ADLS
 - NDLS
 - ICS – 100,200, 300, 400, 700 courses
- Local training resource: Pacific Emprints:
<http://www.emprints.hawaii.edu/index.aspx>
- FEMA Site: <http://training.fema.gov/IS/NIMS.asp>

ICS: Background & Discussion

(1/2)

ICS (Incident Command System) was originally developed in the 1970s during massive wildfire suppression efforts in California and following a series of catastrophic wildfires in California's urban interface. Property damage ran into the millions, and many people died or were injured. Studies determined that response problems often related to communication and management deficiencies rather than lack of resources or failure of tactics. ICS fell under California's Standardized Emergency Management System or SEMS. In 2003, SEMS went national with the passage of Homeland Security Directive number 5 "mandating" all federal, state, and local agencies use **NIMS or the National Incident Management System** to manage emergency in order to receive federal funding.

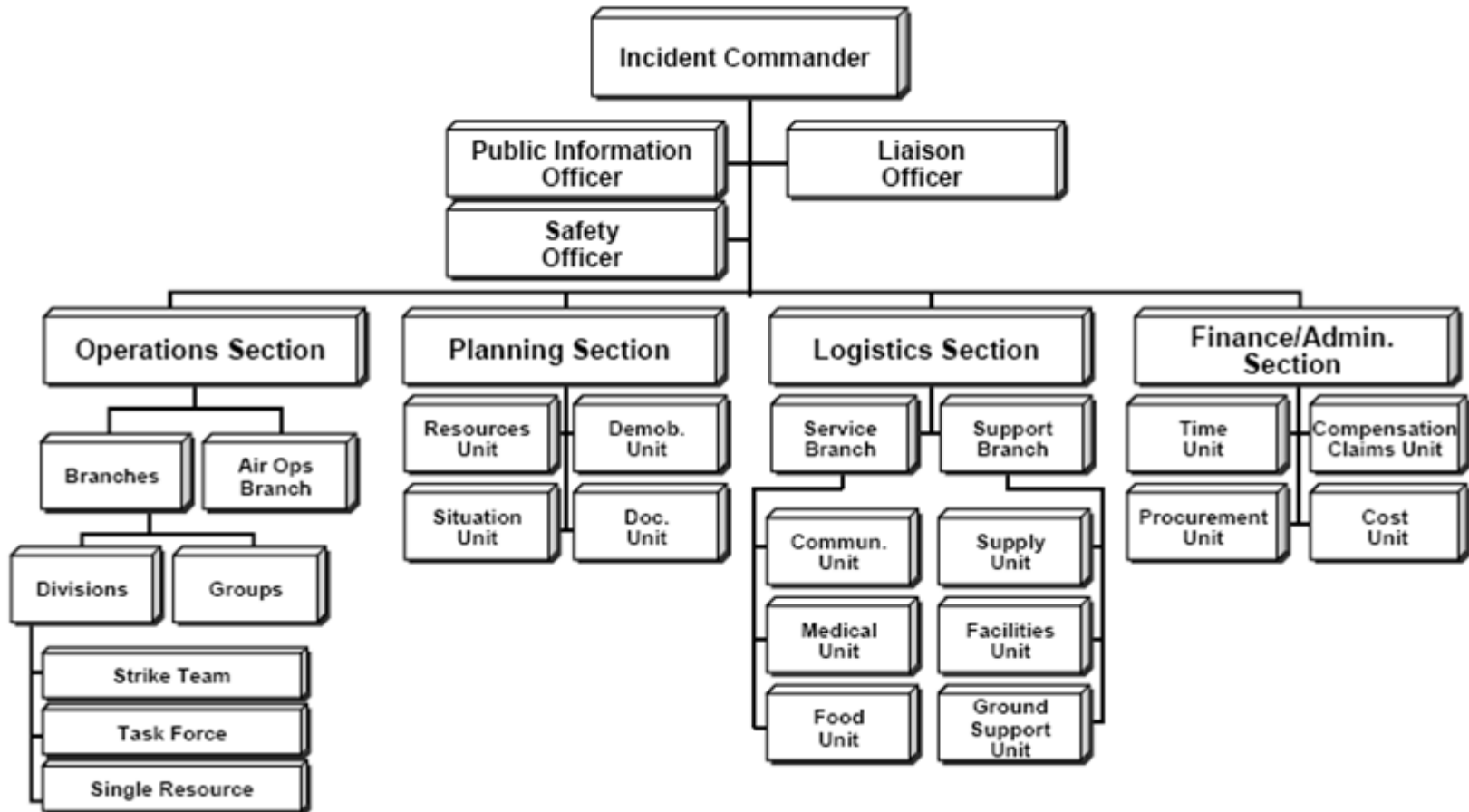
ICS: Background & Discussion

(2/2)

Weaknesses in incident management were often due to:

- Lack of accountability, including unclear chains of command and supervision.
- Poor communication due to both inefficient uses of available communications systems and conflicting codes and terminology.
- Lack of an orderly, systematic planning process.
- No predefined methods to integrate inter-agency requirements into the management structure and planning process effectively.
- Freelancing by individuals with specialized skills during an incident without coordination with other first responders
- Lack of knowledge with common terminology during an incident.
- Emergency managers determined that the existing management structures – frequently unique to each agency – did not scale to dealing with massive mutual aid responses involving dozens of distinct agencies and when these various agencies worked together their specific training and procedures clashed. As a result, a new command and control paradigm was collaboratively developed to provide a consistent, integrated framework for the management of all incidents from small incidents to large, emergencies.

Sample Incident Command (from ICS-100)



Examples of ICS Course Series:

- **ICS300**

Persons serving as command staff, section chiefs, strike team leaders, task force leaders, unit leaders, division/group supervisors, branch directors, and multi-agency coordination system/emergency operations center staff.*

- ICS Staffing and organization to include: reporting and working relationships and information flow.
- Transfer of Command
- Unified Command functions in a multi-jurisdictional or multi-agency incident
- ICS forms
- Resource Management
- Interagency mission planning and procurement

- **ICS 400**

- Command and General Staff
- Deputies and assistants
- Unified command
- Organizational relationships between Area Command, Unified Command, Multi Entity Coordination Systems, and Emergency Operations centers (EOCs)

ICS Course Titles

- IS-100.a (ICS 100) Introduction to Incident Command System
- IS-100.HC Introduction to the Incident Command System for Healthcare/Hospitals
- IS-100.HE Introduction to the Incident Command System for Higher Education
- IS-100.LEa Introduction to the Incident Command System for Law Enforcement
- IS-100.PWa Introduction to the Incident Command System for Public Works Personnel
- IS-100.SCa Introduction to the Incident Command System for Schools
- IS-200.a (ICS 200) ICS for Single Resources and Initial Action Incidents
- IS-200.HC Applying ICS to Healthcare Organizations
- IS-700.a National Incident Management System (NIMS), An Introduction
- IS-800.b National Response Framework, An Introduction

Incident Command System (ICS) Forms

- Intended to assure completeness and consistency in reporting progress of response to an emergency.
- Employable for any emergency, it is designed for incidents that exceed the elasticity of day-to-day resources in a given setting
 - Arguably, every day in an ER entails disaster management
 - Some organizations are designed to both absorb and even to create disaster (e.g., military)
 - ICS imposes structural order on an incident, guides the participant through assembly and use of resources, and encourages a long-term overview of response
 - <http://training.fema.gov/EMIWeb/IS/ICSResource/index.htm>

Sample UHM Drill Activity (24 May 06)

Topic: Hurricane Makani Pahili Exercise

Involved Agency: John A. Burns School of Medicine, by direction of the University of Hawai'i, Manoa

Contact Person: William F. Haning, III, M.D. 692-0877, e-mail haning@hawaii.edu

Action taken: Dissemination of contact list and telephone tree to involved parties.
Telephone tree rehearsal pending.

Extramural Agency Contacts:

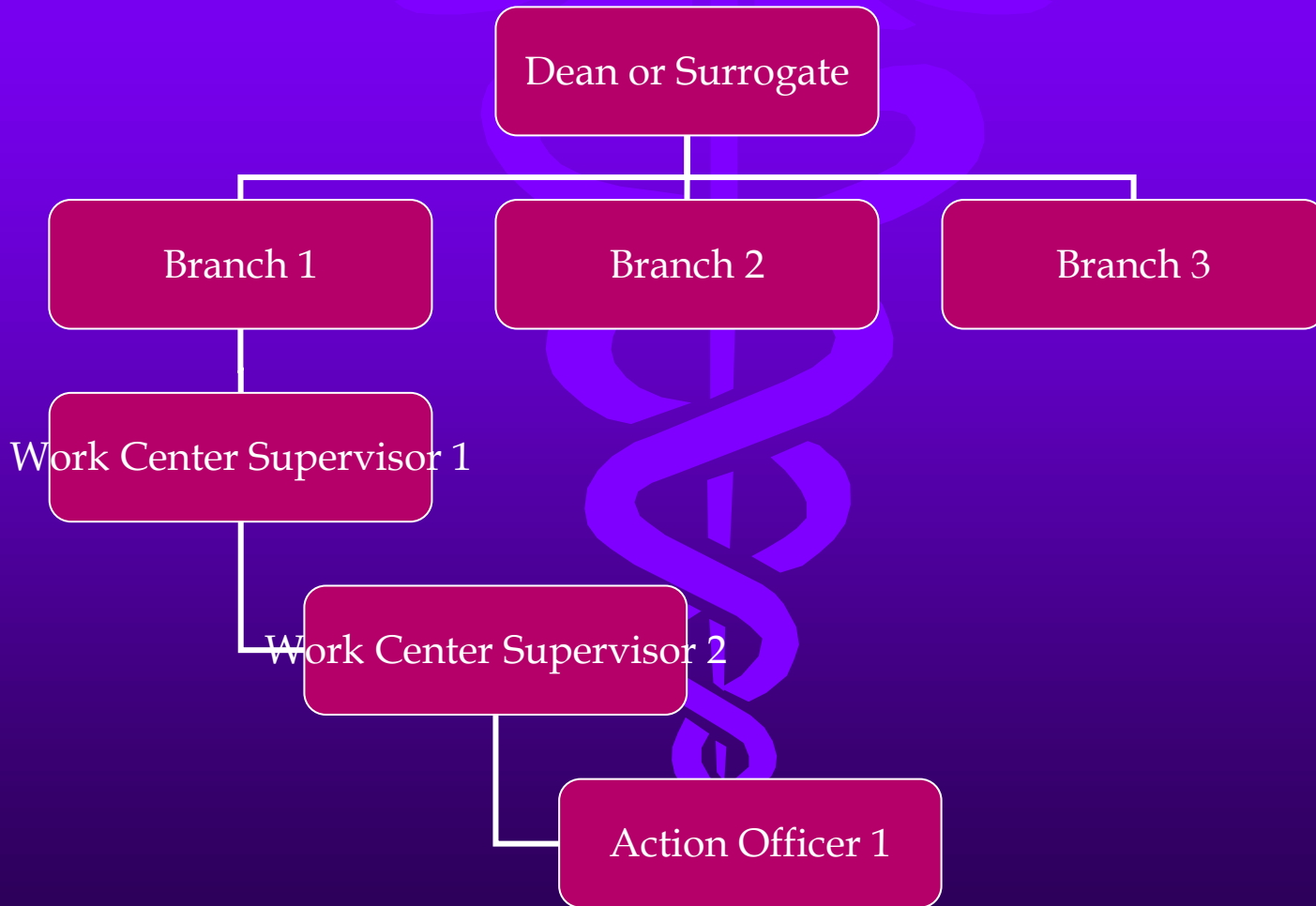
State Civil Defense (SCD) (Kevin Richards) to assure placement on notification roster.

Healthcare Association Hawaii (HAH) (Toby Clairmont) to verify inclusion on HAH alert roster; responded to test call from HAH 19 May.

Emergency Information Access

- Presently, EHSO:
<http://www.hawaii.edu/ehso/>

Contact Tree



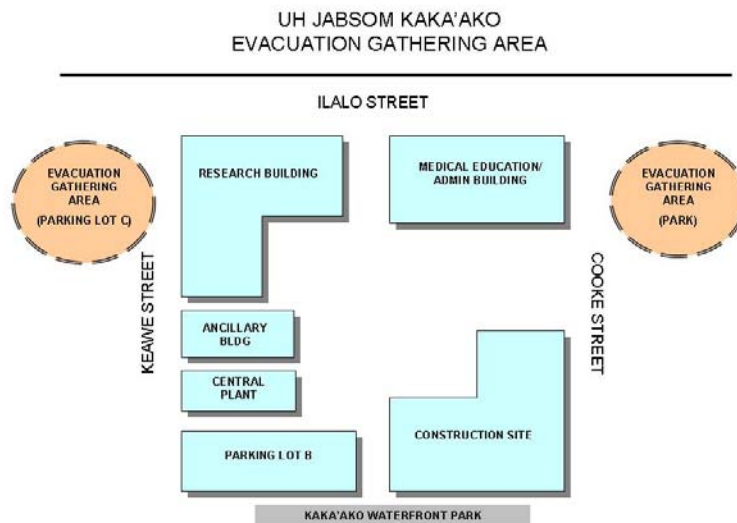


SUMMARY OF ACTIONS DURING SPECIFIC EMERGENCIES AT JABSOM KAKA'AKO

EVACUATION PROCEDURE

Should the building's fire alarm be sounded or if you are instructed by emergency services (HFD, HPD, Security) to evacuate the building, these procedures should be followed:

1. Gather your personal belongings (keys, purse, wallet, cell phone) only if it is in the immediate area and is safe to do so.
2. Immediately evacuate the building without delay. Close doors if possible (do not lock doors).
3. Remain calm and use the nearest emergency EXIT to leave the building (DO NOT use the elevators or MEB main lobby stairwell.). To locate emergency EXITs, follow the illuminated "EXIT" signs in the building.
4. Disabled people that are elevator dependant will need assistance. Please follow these procedures when assisting them:
 - Escort the person to the closest emergency EXIT stairwell landing (this is considered the "area of rescue assistance" for disabled people).
 - Leave them at the stairwell landing so that trained personnel can return to move them safely.
 - Continue to evacuate and once outside, immediately inform the Fire Dept, Police Dept, or Security of where the person needing evacuation assistance is waiting.
5. When evacuating the building, move away from the building's entrances and clear building access for emergency response personnel.
6. Once you are out of the building, go to a designated evacuation gathering area to await further instructions from emergency services.
7. **DO NOT** return to the building until the Honolulu Fire Department or Honolulu Police Department says you may go back in.



FIRE

If a fire is detected on campus, these procedures should be followed:

1. Notify others in the nearby area that there is a fire.
2. It is advised that you evacuate the building and leave the fire fighting to the HFD but you may attempt to extinguish a small fire if:



- a. If you have been trained to use a fire extinguisher
- b. there is no one in immediate danger
- c. you can do so safely.

Otherwise DO NOT attempt to extinguish a fire.

3. Sound the building's fire alarm at the nearest alarm pull station. This should announce a fire alarm to security who is then tasked to call 911 HFD. If you have any pertinent information about the fire, try to communicate it to emergency response personnel upon their arrival.
4. Evacuate the building using one of the emergency EXITS (follow the illuminated "EXIT" signs).
5. Close all doors as you evacuate if it can be done safely.
6. Avoid using the elevators and the MEB main lobby stairwell.
7. Assist any physically challenged and/or disabled individuals:
 - a. Assist the individuals to an emergency exit stairwell landing.
 - b. Leave the individual(s) at the stairwell landing so that trained personnel can return to move them safely; remember the stairwell number and location.
 - c. Continue to evacuate the building.
 - d. Once outside, immediately inform emergency response personnel of the location and condition of the disabled individual(s).
8. Once outside of the building, proceed to the predetermined "**Evacuation Gathering Areas**".
 - a. **MEB Occupants:** Gather at the Cooke Street entrance to the Kaka'ako Waterfront Park, on the Diamond Head side of the JABSOM Kaka'ako Medical Education/Admin Building.
 - b. **BSB Occupants:** Gather in Parking Lot C.
 - c. If these gathering areas are downstream of any noxious fumes/smoke, proceed to a gathering area upstream of the fumes/smoke.
 - d. Check-in with fellow staff/researchers so it is evident that you have safely evacuated the building.
 - e. A responsible individual per department or lab should be tasked with ensuring staff who were present that day have evacuated and checked-in.
9. Call the Fire Department (911) if they have not been notified yet.
10. Notify emergency services (HFD or HPD) of the specific location of where any physically challenged people are located in the building or if you feel that someone is missing.

DO NOT return to the building until the Honolulu Fire Department or Honolulu Police Department indicates it is safe to enter.

MAJOR HAZARDOUS MATERIAL SPILL or RELEASE

Major hazardous material spills/releases* of disaster magnitude would include runaway experiments, major spills or hazardous releases of radioactive or infectious biological material, or storage accidents involving large quantities of toxic or otherwise hazardous chemicals. Should such an accident endanger the employees and students of the JABSOM Kaka'ako, these procedures should be followed:

1. Attend to anyone who may be hurt or contaminated if it can be accomplished without endangering yourself.
2. Get away from the area of the spill immediately to ensure your safety and notify those in the nearby areas about the spill.
3. Notify Security (692-1911 or 692-0911). Inform them on the nature of spill.
4. If you are instructed to evacuate the building, use the emergency EXITS and go to a designated Evacuation Gathering Area to await further instructions. If fumes/vapors/smoke from the incident are reaching the Evacuation Gathering Area, move to an alternate area that is upwind of the incident and at least 300 feet from the building.

*A major spill/release is defined as a spill/release that spreads rapidly, cannot be contained or cleaned up by workers, and a spill/release that endangers people/property/environment upon contact/exposure. There are no large quantities of biohazardous materials or radioactive materials stored at Kaka'ako; and the only chemicals stored at reportable quantities include formaldehyde and diesel fuel.



NATURAL DISASTERS

Disaster preparedness is critical. Hawai'i State Civil Defense provides an early warning system through the use of "Watches and Warnings" with statewide notification by sirens. With the exception of an earthquake, Civil Defense will most likely be able to provide some warning and time to initiate the UH's Emergency Response Plan in response to an impending disaster (e.g. hurricane, tsunami). Each research department and lab should have an emergency response plan which includes specific response information and tasks.

When you hear the warning sirens, immediately go to a place where you can listen to a radio:

- In all cases, when you hear a siren, tune your radio to any station. Listen to emergency information and instructions broadcasted by Civil Defense, TAKE NECESSARY ACTIONS.
- The radio stations will also broadcast information about the status of State functions (if they are open, closed, who should or should not report to work).
- DO NOT USE YOUR TELEPHONE EXCEPT IN AN EMERGENCY

EARTHQUAKES:

Earthquakes occur without warning.

If you are:

- Indoors – get under desk or table. Stay clear of bookshelves or heavy equipment that could fall on you.
- Outdoors – stay in the open. Do not enter damaged buildings. Beware of fires, downed power lines, aftershocks, unstable structures, and falling trees.
- Driving – stop. Stay in vehicle.

HURRICANES:

- **WATCH:** Storm is expected within 36 hours. All University activities will be suspended and students, employees, and visitors are expected to leave.
- **WARNING:** Storm expected within 24 hours. At this point, the Civil Defense sirens will sound. Listen to your radio for emergency information and instructions. If you are unable to leave during the hurricane "watch" state and are at JABSOM Kaka'ako when the hurricane arrives, these procedures are to be followed:
 1. Seek shelter immediately.
 2. Tape up glass panes on windows and doors in the area that you are seeking shelter.
 3. Close windows and blinds (draw all drapery to the closed position.)
 4. Find a safe place away from any windows to wait out the hurricane.
 5. Turn on a radio or television for the latest advisory information from the Emergency Broadcast System.
 6. After the winds have subsided, leave the building if you are able to do so safely (avoiding any broken glass, unstable fallen objects, or fallen power lines).
 7. Notify Emergency Services (911) of any potentially harmful damage to the building that you may have noticed (i.e.-fallen power lines, broken gas lines, etc.)

TSUNAMI:

- **WATCH:** Tsunami possible. Take necessary precautions.
- **WARNING:** Civil Defense Sirens will sound at this point. Listen to your radio for emergency information and instructions.

FLOOD AND WATER DAMAGE

Serious water damage can occur from a number of sources such as broken water pipes, malfunctioning of autoclaves or equipment, clogged drains, and coastal flooding. If flooding or water damage occurs in or in the vicinity of the building, follow these procedures:



1. Attend to anyone who may be in danger or need help. If there are electrical appliances or electrical outlets near the leak, use extreme caution. If there is any possible danger from electricity, evacuate the area.
2. Attempt to prevent others from entering into the area if this can be done safely.
3. Notify Security (692-1911 or 692-0911) immediately of the exact location and nature/severity of the flooding or water damage. Identify the exact source of the water release in order for Facilities to shut off the water supply valve.
4. Notify Security if water is possibly contaminated with any chemical, biological, or radioactive material and contact JABSOM EHSO immediately.
5. If possible and safe to do so, use absorbents from spill response kits to contain the water.
6. If possible and safe to do so, move hazardous materials to higher ground.
7. When moving through the flooded area, use caution to avoid slipping.
8. If coastal flooding occurs, do not evacuate the building unless advised to do so. Move to higher ground and remain calm.

SERIOUS INJURY

Should you witness a serious injury at JABSOM Kaka'ako, the following procedures should be followed:

1. Do not move a seriously injured person unless a life-threatening situation exists.
2. Immediately call Security (692-0911 or 692-1911). Give your name, location, and telephone number. Provide as much information as possible regarding the nature of the injury or illness, along with whether or not the victim is conscious and/or breathing.
3. After you call Security (692-0911 or 692-1911), return to the victim and if necessary administer first aid and/or initiate CPR if you have been trained.
4. First Aid Kits are located at each security desk.
5. An AED is located at each security desk.
6. Red Cross First Aid/Adult CPR/AED training is offered once a year at JABSOM Kaka'ako.
7. Body fluid and blood spill clean up kits are located at the security desks and at the JABSOM EHSO office. Avoid exposure to blood and potentially infectious bodily fluids. Contact JABSOM EHSO about blood and potentially infectious material spills, contamination, or exposure.

EXAMPLES OF WHEN TO CALL SECURITY FOR HELP:

If the victim:

- is or becomes unconscious
- has trouble breathing or is breathing in a strange way
- has chest pains
- is bleeding severely
- has pressure or pain in the abdomen that does not go away
- is vomiting or passing blood
- has seizures, a severe headache, or slurred speech
- appears to have been poisoned
- has injuries to the head, neck, or back
- has possible broken bones

All individuals involved in or who witnessed a serious injury need to contact the JABSOM EHSO (692-1854) after the injured person(s) has been attended to so that the situation can be documented. Any "near miss" incidents should also be reported to the JABSOM EHSO.

SUSPICIOUS PACKAGE

If you see a suspicious box, package, envelope, etc, report it to Security (692-0911 or 692-1911) but under no circumstances should you touch it, tamper with it, or move it in any way.

If you receive a suspicious box, package, envelope, etc., follow these procedures:



1. Do not open or move the package.
2. Vacate the immediate area and call Security (692-0911 or 692-1911).
3. Notify Security of the location of the package and also give them a description of it (size, shape, any writing on the package, etc.).

Do not return to the location of the package until Security says that you may.

BOMB THREAT

Bomb Threats usually occur by telephone.

1. Do not hang up on the caller.
2. Keep them on the phone for as long as possible to get as much information as you can.
3. Once the caller has ended the phone call, notify Security (692-0911 or 692-1911) immediately.
4. Give your answers to the questions below to Security.
5. If you are instructed to evacuate the building use the emergency EXITs and go to a designated evacuation gathering area to await further instructions. Check-in with your lab/office/department members so that they are aware that you have evacuated the building.

The person receiving the call should use the questions below to assist them in getting as much information from the caller as possible:

1. When is the bomb going to explode? _____
2. Where is it right now? _____
3. What does it look like? _____
4. What kind of bomb is it? _____
5. What will cause it to explode? _____
6. Did the caller place the bomb? _____
7. Why? _____
8. What is the caller's address? _____
9. What is the caller's name? _____
10. What is the caller's sex/age? _____

CHARACTERISTICS OF CALLER'S VOICE:

- | | | | | |
|----------------------------------|-----------------------------------|----------------------------------|--|---|
| <input type="checkbox"/> Calm | <input type="checkbox"/> Laughing | <input type="checkbox"/> Lisped | <input type="checkbox"/> Distinguished | <input type="checkbox"/> Rapid |
| <input type="checkbox"/> Angry | <input type="checkbox"/> Crying | <input type="checkbox"/> Raspy | <input type="checkbox"/> Accent | <input type="checkbox"/> Slurred |
| <input type="checkbox"/> Excited | <input type="checkbox"/> Normal | <input type="checkbox"/> Deep | <input type="checkbox"/> Familiar | <input type="checkbox"/> Soft |
| <input type="checkbox"/> Slow | <input type="checkbox"/> Distinct | <input type="checkbox"/> Ragged | <input type="checkbox"/> Clearing Throat | <input type="checkbox"/> Nasal |
| <input type="checkbox"/> Loud | <input type="checkbox"/> Nasal | <input type="checkbox"/> Stutter | <input type="checkbox"/> Deep Breathing | <input type="checkbox"/> Cracking Voice |

BACKGROUND SOUNDS:

- | | | | |
|---|--|--|-------------------------------------|
| <input type="checkbox"/> Street Noise | <input type="checkbox"/> House Noises | <input type="checkbox"/> Clear | <input type="checkbox"/> Motor |
| <input type="checkbox"/> Booth (echo) | <input type="checkbox"/> Voices | <input type="checkbox"/> Office Machines | <input type="checkbox"/> PA systems |
| <input type="checkbox"/> Factory Noises | <input type="checkbox"/> Animal Noises | <input type="checkbox"/> Static | <input type="checkbox"/> Music |

THREAT LANGUAGE:

- | | | | |
|--------------------------------------|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> Well spoken | <input type="checkbox"/> Foul | <input type="checkbox"/> Incoherent | <input type="checkbox"/> Caller reading a message |
| <input type="checkbox"/> Irrational | <input type="checkbox"/> Taped call | | |

CIVIL DISTURBANCE

Civil disturbances include riots, property damage, threatening individuals, or assemblies that have become significantly disruptive. Should a civil disturbance endanger the employees and students of JABSOM Kaka'ako, these procedures should be followed:



1. Notify Security (692-0911 or 692-1911).
2. Avoid provoking or obstructing demonstrators.
3. Secure your area (lock doors, secure hazardous materials, secure sensitive and confidential information, and secure critical and valuable equipment).
4. If the disturbance is outside, stay inside and away from doors and windows.

CRIME IN PROGRESS

Should you witness a crime in progress at JABSOM Kaka'ako, these procedures will be followed:

1. Do not attempt to apprehend or interfere with the criminal except in the case of self-protection.
2. If safe to do so, get a good description of the criminal. Note height, weight, sex, race, clothing, as well as method and direction of travel. If there is a vehicle involved, note the license plate number, make and model, color, and outstanding characteristics (ex: cracked break light, stickers on bumper, etc.)
3. Notify Security (692-0911 or 692-1911) of the crime and remain where you are until contacted by Security.
4. If you are the victim of a crime involving money or property, you should:
 - Not resist, do as the person says.
 - Give up the money/property immediately.
 - Attempt to get a good description of the person and direction they left.
 - Notify Security (692-0911 or 692-1911) once it is safe.
 - Ask any witnesses to wait with you for Security to arrive.

VIOLENCE IN THE WORKPLACE

Should a violent incident in the workplace occur, these procedures should be followed:

1. Seek cover to protect yourself and remain calm.
2. If a phone is accessible to you, call "911" (Police Department) immediately to report the incident.
3. Do not attempt to stop or disarm the individual(s).
4. If you are not in the immediate area but hear shots, seek cover to protect yourself or move away to a safer location.
5. Do not attempt to get to your vehicle to leave.
6. Wait in a safe location for someone from emergency services (Security, Police Department, Fire Department, etc.) to find you and give you further instructions.

POWER OUTAGES

Should a power outage occur at JABSOM Kaka'ako, these procedures should be followed:

1. Notify Security (692-0911 or 692-1911).
2. Disconnect all equipment (e.g. computers) that could be damaged by a power surge when electricity is restored.
3. Turn off all lights, appliances, and other energy users to reduce the power requirements for restoration.
4. If working in a chemical fume hood or a biosafety cabinet, the exhaust system will shut off when the power goes out; calmly and quickly stop what you are doing, close any open containers, and close the sash. Do not work in a fume hood or biosafety cabinet until you determine that the fume hood or biosafety cabinet is functioning properly.

Do not evacuate the building unless instructed to do so by emergency services (HPD, HFD, and Security). If you are instructed to evacuate the building, use the emergency EXITS and go to a designated evacuation gathering area to await further instructions from emergency services.



WEBSITES:

UH Manoa Emergency Management Program

<http://manoa.hawaii.edu/emergency/index.html>

UH JABSOM Environmental Health and Safety Office

<http://www.hawaii.edu/ehso/jabsom/>

UH Manoa Environmental Health and Safety Office

<http://www.hawaii.edu/ehso/>

City & County of Honolulu Department of Emergency Management

<http://www.co.honolulu.hi.us/ocda/>

American Red Cross

<http://www.redcross.org/>

IMPORTANT DISCLAIMER:

This guide is in no way binding, nor does it supersede any federal, state, or local laws or regulations. This guide has been prepared for your convenience. It is intended as a reference guide and contains general descriptions and summaries of procedures to assist you in the event of an emergency. It is important to understand that each emergency incident will have its own unique obstacles to overcome the situation.

Your best judgment is the key to safely overcoming any emergency situation and when making decisions during an emergency, your main priority should be your safety.

JABSOM KAKA'AKO EMERGENCY PHONE NUMBERS

From a campus phone, you must dial 9 first to get an outside line
Area Code: 808 (Dial 9-1-808-seven digit number)

Security **(BSB) 692-1911**
(MEB) 692-0911

Police/Fire/Ambulance **911**

***Dial 9-911 when calling from JABSOM phones**
***Dial 911 or 9-911 when calling from CRCH phones**

Poison Control Center **1-800-222-1222**

JABSOM EHSO **692-1854; 590-0734**
692-1855; 590-1554

JABSOM Facilities **692-0913** (Engineering Mngr)
692-1851 (Core Lab Engineer)
692-1880 (Maintenance Supv)
692-0919 (Director)

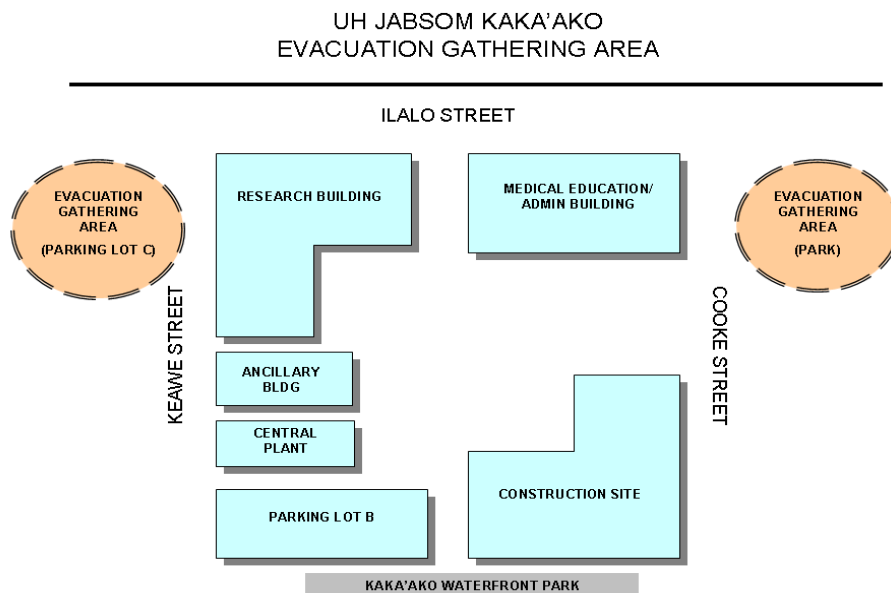
Manoa EHSO **956-8660**
Manoa Security **956-6911**

University of Hawaii • John A. Burns School of Medicine at Kaka'ako Fire Emergency Evacuation Procedure

If a fire is detected within a JABSOM Kaka'ako building, these procedures are to be followed:

1. Verbally notify others in the nearby area that there is a fire.
2. You may attempt to extinguish the fire if:
 - the fire is small;
 - you have been trained to use a fire extinguisher, and;
 - you have an unobstructed exit pathway.

DO NOT attempt to extinguish a fire if all three of the above criteria are not met and/or if you do not feel safe doing so.
3. Sound the fire alarm at the nearest alarm pull station.
4. Gather your personal belongings (keys, purse, wallet, cell phone) only if it is in the immediate area and is safe to do so.
5. Close and lock doors. If time permits, secure any hazardous material and/or sensitive equipment.
6. Evacuate the building using one of the emergency EXITS (to locate, follow the illuminated, overhead EXIT signs). DO NOT use the elevators or MEB main lobby stairwell.
7. Assist any mobility-impaired or "elevator dependent" individuals to the nearest exit stairwell landing and try to position them away from evacuating traffic. These individuals should remain in the stairwell landing so that trained personnel can return to move them safely.
8. Proceed to the nearest Evacuation Gathering Area (see the map below).
9. Call the Honolulu Fire Department (HFD) if they have not been notified yet.
10. Immediately notify JABSOM Security and/or Emergency Services (HFD or HPD) of any mobility-impaired individuals still in the building or if you believe that someone is missing.
11. DO NOT return to the building until the HFD or HPD and/or JABSOM Security states that you may re-enter the building.



EMERGENCY PHONE NUMBERS:

- *Dial 9-911 when calling from JABSOM phones
- *Dial 911 or 9-911 when calling from CRCH phones
- *Dial 911 when calling from your cellular phone

POWER OUTAGES in Kaka'ako BSL2 LABORATORIES

Should a power outage occur at JABSOM Kaka'ako, these procedures shall be followed:

1. If you're working with **hazardous or infectious materials**, calmly stop what you're doing and close all containers of hazardous or infectious materials.
2. If you're working with **animals**, calmly stop what you're doing and return the animal to its cage if possible.
3. If you're working in a **fume hood** or a **biosafety cabinet**, stop what you're doing, close all containers, and close the sash. **DO NOT** work in a fume hood or biosafety cabinet that is not operating properly.
4. **Decontaminate and doff PPE** as usual.
5. **Turn off and disconnect all equipment and computers** that could be damaged by a power surge when electricity is restored.
6. **Turn off all gas cylinders** at the tank valves. (If a low flow of an inert gas is being used to blanket a reactive compound, it may be appropriate to leave the flow of gas on; this must be documented in the lab specific protocols/SOPs.)
7. **Do not open** freezers, refrigerators, cold rooms, incubators, centrifuges.
8. Turn off all lights to reduce the power requirements for restoration.
9. **Do not evacuate the building unless instructed to do so by emergency services (HPD, HFD, and Security).**
10. **If you are instructed to evacuate the building, follow the overhead emergency EXIT signs, exit the buildings, and go to the designated evacuation gathering area to await further instructions from emergency services.**

*Kaka'ako Vivarium, ABSL3, and BSL3 labs are on standby emergency power, therefore, during a power outage, these areas should ideally be unaffected. LAS and the Level 3 Users have developed specific procedures for power outages and/or equipment or exhaust failures. If power failure occurs or the air flow and exhaust air shuts off, contact Security and Facilities immediately.

*Procedures for power outages experienced in the Facilities Workshop and Chiller Plant are similar to the BSL2 Laboratory Procedures during a Power Outage.

*Procedures for power outages experienced in the Medical Education Building and Ancillary Building, refer to the general Emergency Procedures for JABSOM Kaka'ako.



NATURAL DISASTER PREPAREDNESS FOR JABSOM LABORATORIES

Hurricanes, tsunamis and other natural disasters can threaten the safety and operation of research laboratories. Plans should be developed well in advance of these events to ensure the preservation of life and property. For general emergency preparedness information please go to the **UH Manoa Emergency Management** website at <http://manoa.hawaii.edu/emergency>.

In order to properly plan a course of action in research laboratories using hazardous materials, it is important to understand the difference between an advisory, watch and a warning. Refer to the agencies listed at the end of this document for accurate and current information.

CONTINGENCY PLAN:

Note: This contingency plan does not encompass all hazards in a lab.

1. **Once a Watch is issued the following should be implemented in your research areas.**

a. **Experiments:**

Complete all running experiments and do not begin any new experiments that would require attention during an evacuation period or while a warning is in place.

Note: Even with backup generators available, researchers should protect their valuable materials in case power, water, gas, electrical security features, communication utilities and HVAC (air conditioning and ventilation) are out of service for an extended period of time. Special arrangements may need to be made to protect and prevent release of hazardous materials.

b. **Hazardous Materials (chemical, biological, radiological):**

- Ensure all hazardous material and waste containers are clearly labeled and sealed. Hazard Warning labels are critical during post disaster response.
- Materials that are volatile, toxic, infectious, or pose a respiratory hazard must be stored in tightly sealed impervious and impact-resistant containers which are secured.
- Move all chemicals to appropriate storage locations (i.e., in cabinets and shelves away from windows).
- Store water reactive chemicals in tightly sealed, waterproof containers.
- Place flammable materials in approved flammable cabinets.
- Remove chemicals from upper shelves and limit storage on bench tops.
- Ensure gas cylinders are capped and secured to a permanent fixture using a cylinder strap or chain.
- Prevent the release of hazardous biological materials. Inactivate all cultures that could possibly enter flood waters. Relocate all stock cultures to areas that are not at risk of flooding. Note: If the power and/or gas are out: the boilers are down and therefore the autoclaves are down.
- Prevent the release of research animals.
- Secure radioisotopes.
- Consider moving hazardous materials to locations that are not at risk of flooding.

c. **Chemical Fume Hoods and Biosafety Cabinets:**

- Remove all hazardous materials from fume hoods and BSCs and secure in appropriate storage areas.
- Close sashes completely. If the building experiences a complete loss of power, fume hoods and BSCs will become inoperable.

d. **Equipment:**



- Unplug all non-essential equipment (hot-plates, magnetic stirrers, heat mantles, etc.).
 - Consider protecting sensitive equipment in the event of a power surge.
 - Move equipment as far from windows as possible.
 - Back-up critical computer files.
- e. **Security:**
- Close and lock all laboratory doors.
 - Avoid blocking exits and hallways.
 - Ensure emergency contact information is updated and posted on the outside of the laboratory door.
- f. **Personal Safety**
- Above all else, personal safety is the number one priority. Follow all evacuation commands and do not enter buildings on campus until an all-clear is given by the proper authorities.

Here are some tips to help your lab prepare your plans:

- Update your emergency contact information. Update lab personnel office, pager, home, and cellular phone numbers. Post this outside of your lab and request staff to “carry” this information with them at all times.
- Be prepared to protect lab notes, research documentation, computer hard drives, and any other materials that you cannot afford to have damaged.
- You are responsible for protecting your laboratory and research. Plan ahead and implement your plan as soon as a hurricane or tsunami watch is issued. Annually perform a laboratory drill to test out your laboratory specific emergency response/evacuation plans, including meeting locations, accounting of all staff, communication trees, timelines, designation of responsibilities, etc.

WATCHES AND WARNINGS:

Listen to radio and television (TV) broadcasts and check the University of Hawai'i Website <http://www.hawaii.edu/>.

TSUNAMI WARNING

The highest level of tsunami alert, warnings are issued due to the imminent threat of a tsunami from a large undersea earthquake, or following confirmation that a potentially destructive tsunami is underway. Warnings advise that appropriate actions be taken in response to the tsunami threat. Such actions could include the evacuation of low-lying coastal areas. **Warning** - County Civil Defense sirens will sound.

TSUNAMI WATCH

The second highest level of tsunami alert, watches are issued based on seismic information without confirmation that a destructive tsunami is underway. It is issued as a means of providing advance alert to areas that could be impacted by a destructive tsunami. Watches are updated at least hourly to continue them, expand their coverage, upgrade them to a Warning, or end the alert. Preparations should begin so that all phases of your contingency plan can be implemented in the event that a hurricane warning is issued.

TSUNAMI ADVISORY

The third highest level of tsunami alert, advisories are issued to coastal populations within areas not currently in either warning or watch status when a tsunami warning has been issued for another region of the same ocean. An Advisory indicates that an area is either outside the current warning and watch regions, or that the tsunami poses no danger to that area. The Center issuing the Advisory will continue to monitor the event, issuing updates at least hourly. As conditions warrant, the Advisory will either be continued, upgraded to a watch or warning, or ended.

TROPICAL STORM WATCH

A tropical storm is issued when tropical storm conditions, including winds from 39 to 73 miles per hour (mph), pose a possible threat to a specified coastal area within 36 hours.



TROPICAL STORM WARNING

A tropical storm warning is issued when tropical storm conditions, including winds from 39 to 73 mph, are expected in a specified coastal area within 24 hours or less.

HURRICANE WATCH

A hurricane watch is issued for a specified coastal area for which a hurricane or a hurricane-related hazard is a possible threat within 36 hours.

HURRICANE WARNING

A hurricane warning is issued when a hurricane with sustained winds of 74 mph or higher is expected in a specified coastal area in 24 hours or less. A hurricane warning can remain in effect when dangerously high water or a combination of dangerously high water and exceptionally high waves continues, even though the winds may have subsided below hurricane intensity.

FLASH FLOOD WATCH

A flash flood watch means a flash flood is possible in the area; stay alert.

FLASH FLOOD WARNING

A flash flood warning means a flash flood is imminent and everyone in the area should take immediate action.

RESOURCES:

Below are links to state, federal, and international agencies that provide more information about health, civil, natural, and other types of emergencies.

State Resources

- [American Red Cross Hawai'i State Chapter](http://www.hawaiiiredcross.org/) <http://www.hawaiiiredcross.org/>
- [Department of Health](http://www.state.hi.us/doh/) <http://www.state.hi.us/doh/>
- [Department of Transportation](http://hawaii.gov/dot) <http://hawaii.gov/dot>
 - [Airports Division](http://hawaii.gov/hnl) <http://hawaii.gov/hnl>
- [Hawai'i Criminal Justice Data Center \(Sex Offender Search\)](http://sexoffenders.ehawaii.gov/sexoffender/welcome.html) <http://sexoffenders.ehawaii.gov/sexoffender/welcome.html>
- [Hawai'i State Civil Defense](http://www.scd.state.hi.us/) <http://www.scd.state.hi.us/>
- [Honolulu Department of Emergency Management](http://www.co.honolulu.hi.us/ocda/) <http://www.co.honolulu.hi.us/ocda/>
- [Natural Hazards Hawai'i](http://www.uhh.hawaii.edu/~nat_haz/) http://www.uhh.hawaii.edu/~nat_haz/
- [U.S. Geological Survey Hawaiian Volcano Observatory](http://hvo.wr.usgs.gov/) <http://hvo.wr.usgs.gov/>

Federal Resources

- [Centers for Disease Control and Prevention](http://www.cdc.gov/) <http://www.cdc.gov/>
- [Central Pacific Hurricane Center](http://www.prh.noaa.gov/hnl/cphc/) <http://www.prh.noaa.gov/hnl/cphc/>
- [Department of Health and Human Services](http://www.hhs.gov/) <http://www.hhs.gov/>
- [Environmental Protection Agency](http://www.epa.gov/) <http://www.epa.gov/>
- [Federal Emergency Management Agency](http://www.fema.gov/) <http://www.fema.gov/>
- [Homeland Security](http://www.dhs.gov/index.shtm) <http://www.dhs.gov/index.shtm>
- [Identity Theft \(Federal Trade Commission\)](http://www.ftc.gov/bcp/edu/microsites/idtheft/) <http://www.ftc.gov/bcp/edu/microsites/idtheft/>
- [National Oceanic and Atmospheric Administration \(Weather Alerts\)](http://www.noaa.gov/) <http://www.noaa.gov/>
- [Ready.gov \(National Preparedness Information\)](http://www.ready.gov/) <http://www.ready.gov/>
- [U.S. Department of State](http://www.state.gov/) <http://www.state.gov/>
 - [Travel Warnings](http://travel.state.gov/travel/cis_pa_tw/tw/tw_1764.html) http://travel.state.gov/travel/cis_pa_tw/tw/tw_1764.html

International Resources

- [International Tsunami Information Center](http://ioc3.unesco.org/itic/) <http://ioc3.unesco.org/itic/>
- [Pacific Disaster Center](http://www.pdc.org/iweb/overview.jsp?subg=1) <http://www.pdc.org/iweb/overview.jsp?subg=1>
- [World Health Organization](http://www.who.int/en/) <http://www.who.int/en/>



RADIATION EMERGENCY PROCEDURES

In the event of an accident (spill, ingestion, over-exposure, etc.), the PI shall notify the Radiation Safety Office (RSO) as soon as possible without permitting excessive spreading of contamination or exposure. In the absence of the RSO, contact any Radiation Safety Committee Member.

SPILLS (refer below and to flowchart attached)

- Spill kits shall include a copy of the spill response flowchart.
- When possibility of spills of radioactive material exists, secondary containers or trays should be used.
- Containers should be covered whenever possible and only amounts of radioactive material that is immediately necessary should be taken from the stock.
- In the event of accidental spillage, keep calm, use common sense, protect people, and avoid spreading the contamination.
- If high radiation levels or possibility of airborne contamination from **volatile** radioactive material exist, evacuate the laboratory immediately; secure the laboratory to prevent entry; notify RSO; unnecessary movement or touching shall be avoided.

MINOR SPILLS

The investigator shall:

1. Notify other personnel in the area so they are aware of the spill.
2. Permit only a minimum number of people necessary to deal with the spill to be in the area of contamination.
3. Get supplies ready. Fresh new gloves should be worn to protect hands and avoid spread of contamination; change gloves frequently.
4. Confine the spill immediately by:
 - a. Mark the area of the spill with tape.
 - b. Liquid Spills: While wearing rubber gloves, gently place absorbent material on the spill
 - c. Dry Spills: While wearing rubber gloves, dampen to prevent dispersal with water or oil (except where a chemical reaction could occur).
 - d. Do not wipe or use wiping motion as this may spread the contamination.
5. Remove contaminated clothing (e.g. lab coat, shoes, rubber gloves, etc.), if any, and place in the same area of the laboratory as the spill (shoes should be removed only when there is no possibility of injury or recontamination from broken glass or by contact).
6. Survey the area with appropriate instruments. Check the area around the spill, your hands, clothing and shoes for contamination.
7. Decontaminate the spill area.
 - a. Water and mild soap may be used if necessary.
 - b. Commercially available cleaning supplies should be adequate. If necessary, it is recommended to use them only when other measures such as plain water do not work.
8. Secure all contaminated items in sealed containers to prevent spread of contamination.
9. Notify the RSO at the first opportunity.
10. Permit no further work until so authorized by the RSO.
11. All incidents must be documented. This documentation must include the final survey indicating that all contamination has been removed.

MAJOR SPILLS

The investigator shall:

1. Notify all personnel within the lab and in the vicinity of the lab, as appropriate.
2. Block off the area. Keep bystanders out of the area. Assemble persons who were in the lab at the time of the incident in a place near enough to the contaminated area to minimize the spread of contamination but far enough away to prevent continued involvement.
3. Following a liquid spill, use rubber gloves to place the container in an upright position; make no immediate attempt to clean up the spill.
4. If the spill is on the skin, flush thoroughly with water, avoiding the use of organic solvents or harsh/abrasive cleaners.
5. If the spill is on the clothing, remove the outer garments immediately.



6. Leave the room and prohibit entrance into the contaminated area. Do not track contamination beyond the area. Remove shoes or put protective covers over shoes before leaving the contaminated area.
7. Notify the RSO immediately, giving all details of the spill.
8. Permit no one to work in the area until cleared by the RSO.

ACCIDENTS INVOLVING RADIOACTIVE AEROSOLS (dust, mists, fumes, organic vapors, and gases may or may not be spills)

The investigator shall:

1. Ensure that other persons vacate the room at once.
2. While holding one's breath; turn off any circulating devices (e.g. fans, etc.) and hoods, if possible.
3. Vacate the room as soon as possible.
4. Notify the RSO immediately.
5. Ascertain that all doors to the area are closed and locked.
6. Post guards if necessary.
7. Allow no one to enter the room until cleared by RSO.

INJURIES TO PERSONNEL USING RADIOACTIVE MATERIALS

The objectives for handling radiological emergencies are to assist injured personnel, minimize the radioactive material entering into human body, prevent the spread of contamination, and remove the contamination as soon as possible.

Contaminated areas of the body need to be identified using appropriate survey methods. Do not use any decontamination methods which may spread material, increase penetration into the body, or spread to wounded area, if any.

Loose particles may be removed by gently applying adhesive side of tape to the particles attached to skin. Most contamination may be removed by running water over the contaminated area. Use soap or detergent if water by itself doesn't remove all the contaminants, by applying gentle scrubbing. Avoid harsh scrubbing which may increase skin penetration.

The investigator shall:

1. Ensure that all minor wounds are washed under running water immediately, spreading the gash, cut, etc. to maximize removal of contamination.
2. Ensure that proper first aid is rendered immediately in the case of a serious accident.
3. Contact a physician immediately.
4. Report all accidents or injuries to the RSO immediately; this pertains to overexposure, ingestion, inhalation, etc. as well as cuts or other injuries.
5. Permit no person involved in a radioactive injury to return to work without the approval of the attending physician and the RSO.

FIRES INVOLVING RADIOACTIVE MATERIALS

1. Sound the building alarm; this will evacuate the building.
2. Notify Security 692-1911/0911 and the RSO; provide the exact location of the emergency and the type of emergency.
3. Ensure that lookouts are posted to direct the HFD to the emergency and to inform them of the radiation hazards involved.
4. Attempt to put out the fire if a radiation hazard is not immediately present, if trained in the use of a fire extinguisher and if it can be done without endangering oneself.
5. Inform HFD of the exact nature of the hazards involved and remain in the area (if not injured) at least until the RSO arrives.
6. Assist the RSO with monitoring HFD personnel after the fire, if requested.
7. Allow no one to enter the area until cleared by HFD and the RSO.



SPILL RESPONSE FLOWCHART

Notify other personnel in the vicinity.

Assess the extent of the contamination and ask yourself:

MINOR SPILL

1. Can I realistically handle this incident without help and without undue risk to me?
2. Do I have the resources that I need?

3. Only allow personnel assisting spill response to enter contaminated area.
4. Post signs of spill occurrence at entrances / exits and prevent others from entering the area.
5. Change any contaminated PPE (gloves, shoes) immediately.

Spill Decontamination Procedures

6. Get supplies / spill kit materials (lab coat, sturdy disposable gloves, shoe covers (if appropriate), paper towels or other absorbent, decontamination solution or soap/water, radioactive waste container or sturdy polypropylene bag, and survey supplies)
7. Change gloves frequently to prevent spread of contamination, watch for rips and tears.
8. Use a survey meter to carefully define the extent of the contaminated area.
9. Mark the contaminated area with tape or other marking.
10. Start clean-up at the edge and work inward.
11. Place absorbent material on liquid spills
12. Place wet absorbent material on dry spills
13. Let absorbents pick up spilled material – do not wipe as it may spread contamination.
14. Decontaminate spill area with soap & water or commercially available cleaning supply.
15. Change or remove contaminated PPE / clothing.
16. Secure all contaminated items in sealed containers until waste disposal.
17. Survey the area to ensure decontamination.

18. Notify UH Radiation Safety Office at 956-6475.
19. Notify JABSOM EHSO at 692-1854.

21. No entry until cleared by the UH Radiation Safety Office.
22. Document incident.

MAJOR SPILL

1. Is contamination widespread?
2. Do I need help to readily define and clean up the contamination?

3. Block access to contaminated area.
4. Prevent or minimize spread of contamination.

4. If can be done safely, use appropriate PPE and stop spill from continuing/spreading.
5. **Do not attempt to clean spill.**

6. If you or other personnel are contaminated:
 - a. If on skin, flush at least 15 minutes with water
 - b. Remove contaminated clothing immediately.

7. Leave room and restrict entry.
8. Remove shoes or use protective covers over shoes before leaving contaminated area.

9. Notify UH Manoa Radiation Safety Office at 956-6475 immediately.
10. Notify JABSOM EHSO at 692-1854.
11. Notify JABSOM Security at 692-1911/0911.

12. No entry until cleared by the UH Radiation Safety Office.
13. Document incident.

CHEMICAL SPILL FLOW CHART PROCEDURE

