EMERGENCY PREPAREDNESS

This section of the Washington University School of Medicine (WUSM) Design Standards addresses the following requirements for Emergency Preparedness and its application in WUSM projects:

- AUTOMATED EXTERNAL DEFIBRILLATORS (AED)
- FIRE EXTINGUISHERS
- EMERGENCY EVACUATION MAPS
- EMERGENCY ASSEMBLY POINT (EAP)
- EMERGENCY NOTIFICATION SYSTEM
- AREAS OF REFUGE (FIRE)
- SEVERE WEATHER REFUGE AREAS (TORNADO)
- LOCKABLE SPACES (ACTIVE SHOOTER RESPONSE)
- PREPOSITIONED EMERGENCY RESPONSE CLOSETS (PERC)
- BLUE LIGHT PHONES (STENOPHONES)

The Design Team shall discuss and coordinate items in the following section with the Washington University Emergency Management Department and WUSM Project Manager during the Design Development Phase of the project.

References:

Standards References:
ACCESSIBILITY / UNIVERSAL DESIGN
SPECIALTIES – FIRE EXTINGUISHERS AND CABINETS
AUTOMATED EXTERNAL DEFIBRILLATORS (AED)

DESIGN GUIDELINES

1. Per the American Heart Association, an efficient AED program optimally achieves a three-minute response time from collapse of patient to on-scene arrival of the AED with a trained lay rescuer. Every university-owned building will be equipped with a minimum of one AED, to be located in the ground-floor (main level) elevator lobby or primary gathering space. The following guidelines should be considered by WUSM Operations & Facilities Management Department (OFMD) and Washington University Facilities Planning & Management (FPM) when planning all new construction and major renovation projects:
   a. Buildings consisting of three (3) levels above ground will have one AED installed on the ground-level floor elevator lobby, or in the most central gathering location.
   b. Buildings consisting of 4-6 levels above ground will have two AEDs installed, one on the ground-level floor and one on a mid-level floor. Both AEDs will be installed in the floor’s main elevator lobby, or in the most central gathering location.
   c. High-rise buildings, consisting of seven (7) levels or more above ground, will have one AED on each floor, located in the elevator lobby, or most central gathering location.
   d. High-population spaces, such as cafeterias or fitness centers, will be provided an additional AED, supplemental to the standard building AED guidance above. These AEDs will be located in a highly visible and accessible location.
   e. Consideration for additional AEDs should be given to any large gathering space, such as theaters or sports venues, that could hold large, transient populations and could present a higher risk of cardiac arrest due to the activities held in those venues.
   f. AEDs shall be owner furnished and contractor installed. Architect shall review proposed locations for AEDs, coordinate with other required equipment or devices on walls, and avoid installations that will not meet ADA requirements.

PRODUCT REQUIREMENTS

1. Equipment:
   a. Item #M5066A: Philips Onsite AED, 1 Set of Pads, 1 Battery
   b. Item #R01: Ready Pack
   c. Item #989803170921: AED Wall Sign
   d. Item #989803136531: Defibrillator Cabinet, Basic

2. Contacts:
   a. American Red Cross: Sherri Harris, 314.225.7830, sherri.harris2@redcross.org
      i. Contact Sherri Harris for order form and price quote. Fill out the order form with the PO number and send back to Sherri for ordering.
b. Philips: Anthony Verdeya, 720.347.5487, Anthony.verdeja@philips.com

FIRE EXtinguishers

DESIGN GUIDELINES

1. Fire extinguishers shall be located throughout the building as required by code. Each extinguisher will be kept in a semi-recessed cabinet, be clearly visible to the public with a clear glass or acrylic window, be easily accessible using a roller latch, and be easily identifiable with standard signage.

PRODUCT REQUIREMENTS

2. Fire extinguisher wall sign: Grainger “Fire Equipment, No Header, Plastic, 12”x4” with Mounting Holes, L-Shaped, Not Retroreflective”. Order wall signs through WUSTL Marketplace (Grainger).

EMERGENCY EVACUATION MAPS

DESIGN GUIDELINES

1. Every university-owned building is equipped with an evacuation map with emergency procedures. A minimum of one map per floor, per building, will be located in each elevator lobby, or in the most central location available for visibility and accessibility.
2. OFMD and FPM staff are responsible for creating the emergency evacuation maps, ensuring accuracy of all building emergency equipment / information (fire extinguishers, automated external defibrillators, fire alarm pull stations, severe weather refuge areas, emergency evacuation routes, emergency assembly points, stairwells, and exits), and posting the maps in each building.

PRODUCT REQUIREMENTS

1. Elevator Lobby: (Double) Custom two window sign to accept an 8-1/2” x 11” insert in either window to match the existing campus signage. Overall size is 11.625” x 18.25”.
2. Building Exits: (Single) Custom single window sign to accept an 8-1/2” x 11” insert to match the existing campus signage. Overall size is 9.125” x 11.625”. Include Point of Assembly information.
3. Vendor: Innovations Architectural Signs, Parrish Barton, 636.359.1917, innovationssigns@sbcglobal.net
   a. Contact Innovations for order form, information, and ordering assistance. Contact Emergency Management if any issues arise.
EMERGENCY ASSEMBLY POINT (EAP)

DESIGN GUIDELINES

1. Every university-owned building will be assigned an Emergency Assembly Point (EAP). EAP locations will be assigned by Emergency Management (EM) and identified on a map that is posted on the EM website. A minimum of one exterior EAP sign designating the location outside will also be ordered and installed, typically to a light post, at the EAP location. EAPs will also be identified on the Emergency Evacuation Maps.

2. Vendor: Innovations Architectural Signs, Parrish Barton, 636.359.1917, innovationssigns@sbcglobal.net

EMERGENCY NOTIFICATION SYSTEM

DESIGN GUIDELINES

1. Building fire alarm systems will consist of voice-over / messaging capabilities rather than an audible siren. This system shall be included in the construction documents.

PRODUCT REQUIREMENTS

1. Alertus beacons, with text-to-speech module, will be added to all new construction.
   a. WUSM Project Manager should order standard equipment through Alertus. Coordinate with IT for all data drops.
   b. Emergency Management (EM) will test all equipment upon arrival.
   c. Facilities Fire Alarm staff and EM will conduct full system test once fully installed.

AREAS OF REFUGE (FIRE)

DESIGN GUIDELINES

1. Provide Areas of Refuge (Fire) as required by code. Each area of refuge will be equipped with a two-way communication system, appropriate signage, and meet space requirements spelled out within the building code for accessibility.

SEVERE WEATHER REFUGE AREAS (TORNADO)

DESIGN GUIDELINES

1. Project managers will have a reputable vendor review all building plans and conduct an onsite assessment, once construction is complete, to identify all Severe Weather Refuge Areas in the building. Jensen Hughes was the vendor for the original campus assessment.
2. The vendor will provide clear guidelines, maps, and data for each building.

3. Once assessed by a vendor, Severe Weather Refuge Areas will be added to the building Emergency Evacuation Maps.

**LOCKABLE SPACES (ACTIVE SHOOTER RESPONSE)**

**DESIGN GUIDELINES**

1. Each university building, as well as all satellite clinics and offices, will be equipped with enough identifiable space to allow all assigned occupants, and expected visitors, to take appropriate protective measures during an active shooter incident.

2. Each space will be easily accessible to occupants who quickly need access, and must be easily secured from the inside. The space would ideally have minimal windows in order to maximize its protective capabilities; however, additional evacuation options would be preferable. Locking mechanisms must adhere to applicable fire and building codes.

**PREPOSITIONED EMERGENCY RESPONSE CLOSETS (PERC)**

**DESIGN GUIDELINES**

1. Prepositioned Emergency Response Closets (PERC) are rooms or closets that are Equipped with basic emergency supplies, to be used by university public safety officers during an incident. PERCs shall be strategically located throughout the university based on quick response time from any location on campus.

2. The need for a PERC on any given project should be evaluated with WUSM Protective Services in the initial design meeting.

3. PERCs are currently a WUSM Protective Services initiative. PERCs are not located on any other campus at this time.

**BLUE LIGHT PHONES (STENOPHONES)**

**DESIGN GUIDELINES**

1. Blue Light Phones are designed to provide a passerby with the ability to quickly contact the local public safety department about an emergency incident. They should be equipped with the most current hardware being used on campus and have the capability to reach directly to the local dispatch center.

2. Coordinate with WU Police Department of WUSM Protective Services on the necessity, location, and hardware of all Blue Light Phones.