Fire Safety Plan

Building Fire Safety Plan for:

MEDICAL - DENTAL BUILDING

MSB - 111 / DSB - 110

ZONE - BUILDING NUMBER

(Building Emergency Map Reference)

October 2007

CITY OF LONDON
FIRE PREVENTION DIVISION
FIRE SAFETY PLANS
APPROVED

DATE: November 1, 2007

The University of Western Ontario
FIRE PREVENTION
Fire Safety Plan

Building Fire Safety Plan for:

MEDICAL SCIENCES BUILDING / DENTAL SCIENCES BUILDING

A – 110 / A - 111

(Emergency Map Reference Number)

September 2021

Sept 17/21 - Rev 2021.1 – Replaced FS logo. Replaced CCPS and FSEM references
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1. Introduction

The Ontario Fire Code, Section 2.8 requires the implementation of a Fire Safety Plan for this building/occupancy. Typically, the plan is to be kept in the building in an approved location; however, due to the large number of buildings on and off campus, the Fire Safety Plans are maintained in a central database on the Western Fire Safety website www.fire.uwo.ca.

The implementation of the Fire Safety Plan helps to ensure effective utilization of life safety features in a building to protect people from fire. The required Fire Safety Plan should be designed to suit the resources of each individual building or complex of buildings. It is the responsibility of Western’s Fire Safety Department to ensure that the information contained within the Fire Safety Plan is accurate and complete.

The Fire Protection and Prevention Act Part VII, Section 28, states that in the case of an offence for contravention of the fire code, a corporation is liable to a fine of not more than $500,000 for a first offence and an individual is liable to a fine of not more than $50,000 for a first offence, or to imprisonment for a term of not more than one year, or to both.

This Official Document is to be kept readily available in the approved location for use by building occupants including; staff, fire officials, other public officials and Supervisory Staff.

NOTE: As per the letter of understanding between Western University (and its affiliates who wish to participate) and the London Fire Department received on February 5, 2014, the London Fire Department agrees with the purchasing of tablets and the provided fire safety plans via pdf or other agreed upon format as a means of alternate compliance concerning Sentence 2.8.2.1(3), [Functional statement F12 – to facilitate emergency response, Fire safety objectives 1.2 and 1.5 and Fire Protection Objective 1.2] of the Ontario Fire Code and the City of London Bylaw #F-167-159. London Fire and Western University will liaise going forward on updates of said Fire Safety Plans as required.
Definitions

Alarm Signal: an audible signal transmitted throughout a zone or zones or throughout a building to advise occupants that a fire emergency exists.

Approved: approved by the Chief Fire Official.

Assembly: the type of occupancy or the use of a building, or part thereof, occupancy by a gathering of persons for civic, political, travel, religious, social, educational, recreational or like purposes or for the consumption of food or drink.

Building: any structure used or intended for supporting or sheltering any use or occupancy.

Check: means visual observation to ensure the device or system is in place and is not obviously damaged or obstructed.

Chief Fire Official: the assistant to the Fire Marshal who is the City of London Fire Chief or a member or members of the fire department appointed by the City of London Fire Chief under Subsection 1.1.8. (of the Ontario Fire Code) or a person appointed by the Fire Marshal under Subsection 1.1.8.

Class A: a fire involving combustible materials such as wood, cloth and paper.

Class B: a fire involving a flammable or a combustible liquid, fat or grease.

Class C: a fire involving energized electrical equipment.

Class D: a fire involving a combustible metal.

Class K: a fire involving cooking oils.

Exit: that part of a means of egress, including doorways, that leads from the floor area it serves to a separate building, an open public thoroughfare or an exterior open space protected from fire exposure from the building and having access to an open public thoroughfare.

Fire Separation: construction assembly that acts as a barrier against the spread of fire and may or may not have a fire resistance rating or a fire protection rating.

Incident Command: the incident management structure used during emergencies by both Western University and municipal emergency agencies.

Incident Commander: the individual representing the authority having jurisdiction (London Fire Department) who is responsible for the coordination and response to a fire emergency.

Incident Commander – Western University: an individual authorized by the President to coordinate the University’s response to an emergency and to notify the Emergency
Operations Control Group (EOCG) in the event of a major incident and/or the municipal emergency agencies incident manager.

**Inspect (Inspection):** means physical examination to determine that the device or system will apparently perform in accordance with its intended function.

**Occupancy:** the use or intended use of a building or part thereof for the shelter or support of persons, animals or property.

**Occupant Load:** the number of persons for which a building or part thereof is designed.

**Owner:** any person, firm or corporation having control over any portion of the building or property under consideration and includes the persons in the building or property.

**Single Stage Fire Alarm System:** a fire alarm system designed so that activation of any alarm initiating device (i.e. manual pull station, smoke or heat detector, etc.) will cause a general evacuation *alarm signal* to sound on all audible signal appliances throughout the building.

**Supervisory Staff:** those occupants of a building who have some delegated responsibility for the fire safety of other occupants under the Fire Safety Plan. This includes the Building Emergency Coordinator, Building Emergency Team members, and/or Residence Life Staff. In residence buildings supervisory staff is supported by Dons, and in all other buildings the primary occupant will select Building Emergency Coordinator(s) who in turn will recruit Building Emergency Team volunteers from various departments. Dons, BEC and BET members receive online and in person fire safety and fire extinguisher training.

**Test:** means the operation of a device or system to ensure that it will perform in accordance with its intended operation or function.
2. Contact Information
   a. Emergency Contact Information

      Fire, Police, Ambulance: 9-1-1

   b. Building Key Holder(s) Information/Emergency Contacts:

      Building Name: Medical / Dental Sciences Building

      Emergency Map Identification Number (Zone/Number): A-110/A-111

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone/Extension</th>
<th>Alternate Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Special Constable Service (WSCS)</td>
<td>519-661-3300 / x83300</td>
<td>9-1-1</td>
</tr>
<tr>
<td>Fire Safety</td>
<td>519-661-3300</td>
<td>9-1-1</td>
</tr>
<tr>
<td>Fire Alarm Service (Electrical Shop)</td>
<td>519-661-3304</td>
<td></td>
</tr>
<tr>
<td>Sprinkler and Standpipe Service (Western Fire Safety)</td>
<td>519-661-3300</td>
<td></td>
</tr>
<tr>
<td>Elevator Service (Elevator Shop)</td>
<td>519-661-3304</td>
<td></td>
</tr>
<tr>
<td>Occupational Health and Safety</td>
<td>X82194</td>
<td></td>
</tr>
<tr>
<td>Damar Security</td>
<td>1-800-265-7562</td>
<td></td>
</tr>
</tbody>
</table>

c. Building Owner Information

   Western University C/O Fire Safety

   Graphics Building Room 123

   London, ON N6G 1G9

   519-661-3300
3. Building Resources Audit

**General**

**Occupancy Type:** A2, F3

**Occupant Load (If applicable):** contact western fire safety for specific room occupancy loads

**Designated Fire Route:**
- Medical Bldg. – Middlesex drive to front entrance
- Dental Bldg. – Perth Drive to front entrance at Dental Circle

**Municipal/Private Hydrant Location:**
- Medical Bldg. – South of front entrance
- Dental Bldg. – East of front entrance

**Lockbox Location:** N/A

**Type of Heating:** Steam

**Main Gas Shut-off to Building:** Beside the Dental Sciences Siamese connection (see site plan)

**Main Electrical Shut-off Location:**
- Medical Bldg. – RM M010A
- Dental Bldg. – RM 0013

**Main Domestic Water Shut-off Location:**
- Medical Bldg. – Rm M010
- Dental Bldg. – Rm 0003

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**Fire Alarm System**

**Make:** Edwards

**Model:** EST 3

**Main Control Panel Location:**
- Medical Bldg. – Rm M010A
- Dental Bldg. – RM 0013

**Annunciator Panel Location(s):**
- Medical Bldg. – Main entrance
- Dental Bldg. – Main entrance

**Fire Alarm Description:** Single Stage, Conventional/Addressable Mixed, Networked

**Monitoring:** Damar Security

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**Sprinkler System**

**Type:** Wet (covers all of the medial building, dental addition and partial floors at dental)

**Connected to Fire Alarm System:** Yes

**Location of Shut-off/Isolation Valves:**
- Medical Bldg. – RM M010
- Dental Bldg. – RM 0003
Fire Pump Location: Medical Bldg. – RM M010

Standpipe System: Yes

Location of Standpipe Shut-off/Isolation Valves: Above ceiling on first floors

Fire Department Connection: Medical Bldg. – at main entrance

Dental Bldg. – at loading dock beside main entrance

Fixed Extinguishing System for Commercial Cooking Equipment
Location: Medical Building RM 180A

Type: Wet Chemical

Fuel Source: Electric

Location of Fuel Shut-off for Appliances: Panel to the left of appliances

Location of K type Extinguisher: RM 180A

Other
Type of Specialty/Other Extinguishing System(s): N/A

Location: N/A

Portable Fire Extinguishers: Refer to Section 4, Building Diagrams

Type of Emergency Lighting: Integrated into existing lighting system

Type of Emergency Power: Generator

Generator Fuel Supply Type/Location: Diesel / Natural Gas (Natural Gas generator located in DSB RM 0012 and serves ACVS ONLY)

Transfer Switch Location: Medical Bldg. – RM 010A

Dental Bldg. – RM B60, 0013, & 6001

Equipment/Area powered by Generator: All emergency panels throughout building (lighting/ receptacles)

Extra Hazardous Area Location(s): N/A

Exits: Refer to Section 4, Building Diagrams

Elevators:

Type: Firefighter (red helmet designation)

Automatic/Manual Recall: Both

Location of Manual Recall Switch(es): at elevators

Total Number of Elevators: 7

Number of Firefighter Elevators & Location: 3 - Medical Building
Location of Recall/Operating Keys: Medical Bldg. at fire annunciator panel

Operating Instructions: As per TSSA Standards
4. Building Schematics (Floor Plans)
5. Controlling Building Fire Hazards

A high standard of housekeeping and general maintenance is the single most important factor in the prevention of fire. Subsequently, some common fire hazards have been identified:

- Combustible materials stored improperly and in mass quantities in unapproved locations.
- Fire Doors being propped open or not closing properly.
- Improper storage of flammable liquids and gases.
- Defective wiring of appliances and electrical equipment, and/or overloading of specific outlets, power bars and extension cords
- Kitchen hoods and filters not cleaned properly/grease laden.
- Improper disposal of oily rags

Reporting Fire Hazards

Please report all fire hazards to Western Fire Safety at 519-661-3300 or extension 83300. There is no need to give your name and all hazards will be investigated if reported by phone or in person (Please do not report fire hazards by fax or email).
6. Instruction to Occupants

Procedure in Event of a Fire

Throughout campus there are signs posted with instruction pertaining to fire procedures as well as directions to follow in the event of an emergency. A sample of this sign has been included in this plan. You should familiarize yourself with your building’s signage as well as the instructions listed on them.

When the Alarm Sounds:

- Gather your coat, keys, purse, etc. and close your door.
- Evacuate the building using the closest exit. DO NOT USE ELEVATORS
- Proceed to your predetermined meeting place and advise your supervisor, Building Emergency Team or Emergency Personnel of any pertinent information (i.e. People inside, location of the fire, etc.)
- DO NOT re-enter the building until given permission to do so.

![IN CASE OF FIRE](image-url)
Provisions for Persons with a Disability
Persons with a physical disability may be limited in their ability to evacuate by means of stairwells if elevators are not available during a fire alarm. It is primarily for this type of disability that the following procedures apply.

For the purpose of fire safety planning, a “physical disability” is that which, even with the aid of Building Emergency Team members, would prevent a person from descending the stairs in an evacuation situation at a rate of speed consistent with the normal flow of other building occupants, or which would cause such person physical harm if they attempted to descend the stairs.

Procedure When an Alarm Sounds

Ground Level - Evacuation
If you can evacuate the building at ground level, a Building Emergency Team member (BET) or a volunteer should escort you to a safe location away from the building.

Above or below the ground floor – Shelter in Place

1. Seek a safe area with or without the assistance of a BET member. This may be an office, work area, or stairwell.
2. Immediately phone WSCS at 911 to inform them of your location, circumstances for not evacuating and intention to remain in the building.
3. Tell the communication officer that your fire alarm is sounding but you have a disability and cannot leave your floor area. If you smell smoke, or are in immediate danger, immediately inform the communications officer.
4. Provide the phone number and extension you are calling from. It is IMPERATIVE that this number can receive return calls. Note that PAY telephones generally cannot receive incoming calls.
5. WSCS has radio contact with officers at the scene and will provide you with updates on the situation via the phone number you provide. In the event that your safety could be compromised, Firefighters will assist in your safe evacuation. At any time, you can also call back for an update.

Note: The London Fire Department and Western Special Constable Service will respond to the scene within 2-3 minutes of a fire alarm.

Whenever possible, the procedures to be taken for the evacuation of a person with disability should be discussed with the individual. Co-workers may also be informed of these procedures in order to achieve a mutual understanding of the impairment, and the procedures to initiate during an evacuation.
The person(s) with the disability is the best judge of his/her abilities and can provide valuable assistance in developing an evacuation plan. Persons with a sensory impairment (blindness, deafness, etc.) or a minor physical impairment may, with the assistance of their Building Emergency Team members, evacuate as quickly and safely as other building occupants. If this is the case, they should carry out standard evacuation procedures. However, these persons may require at least one Building Emergency Team Member to alert them of the alarm, if necessary, and to assist them to evacuate.

In building fire evacuation exercises (i.e. fire drills), the Building Emergency Team members and person(s) with a disability are to carry out the actions they would normally carry out in an emergency including Shelter in Place procedures.

Occupants who require assistance in evacuating during an alarm are responsible for:

- Advising their Building Emergency Team Coordinator or Western Fire Safety so that a pre-plan can be established;
- Assisting the Building Emergency Team Coordinator or Western Fire Safety in developing a specific evacuation plan if one is required.
- Practicing the evacuation procedures during fire drills and evacuation exercises

Please send any unanswered questions or concerns to firesafety@uwo.ca
Western University Procedures for “Shelter in Place” in designated Operating and Patient Imaging Rooms during fire alarms
(Not applicable to B Occupancy Suites)

Due to the nature of operating suites and imaging rooms it may not be practical or safe for staff and patients to evacuate the building upon activation of a fire alarm. For this reason the following measures have been put in place:

1. If staff are performing surgery, or involved in an animal procedure when the alarm sounds and are unable to safely evacuate the building, they are to immediately phone 911 from a landline telephone residing in the SAME suite where the surgery is taking place and report their location and the reason for not evacuating the building to the WSCS communications operator.

2. If staff are imaging patients, or have patients with disabilities when the alarm sounds and are unable to safely evacuate the building, they are to immediately phone 911 from a landline telephone residing in the SAME suite where the imaging is taking place and report their location and the reason for not evacuating the building to the WSCS communications operator.

3. Staff unable to evacuate must also give a phone number or extension number where they can be reached if WSCS dispatch requires contact with them.

4. WSCS will notify responding emergency personnel of the location of the surgery suite and also advise the occupants should they need to evacuate due to imminent danger. Occupants may also call WSCS communications center for updates throughout the fire alarm.

Per Ontario Fire Code 2.8, Fire Safety is to be notified of any rooms on campus that are regularly used for these purposes so that the necessary pre-planning process can be carried out as well as noted in the building Fire Safety Plans.

All designated suites MUST have a landline telephone installed in the suite that can receive incoming calls.

All designated suites MUST create and post a Standard Operating Procedure (SOP) for their specific room/suite that outlines the individual duties of each person involved in the event of a fire alarm activation. (i.e. who will call WSCS? who will take care of the patient? etc.)

During fire evacuation exercises (i.e. fire drills), the persons staying in the surgery area are to carry out the actions they would normally carry out in an emergency (i.e. make contact with WSCS, etc.).
SOP for General Anesthesia Suites

Schulich School of Dentistry Standard Operating Procedure

Fire & Evacuation Plan General Anesthesia Suites 1.1

Mary Lou Gough R.N.
Schulich School of Dentistry

CITY OF LONDON
FIRE PREVENTION DIVISION
FIRE SAFETY PLANS
APPROVED

DATE Sept 23/15
Schulich Fire Safety & Evacuation Plan General Anesthesia Suites

Introduction

The General Anesthesia Suites are built according to the current Ontario Building Codes (OBC). Should a fire occur outside of the Suites, staff and patients are sheltered safely inside the unit for 2 hours or until otherwise directed by the Fire Department. Conversely if a fire occurs within the suite, patients and staff are evacuated to safety located in the Dental Reception Area.

This Fire Safety and Evacuation Plan ensures competent staff response to fires which occur outside of the GA Suites and for fires which occur inside the GA Suite, ultimately resulting in safe patient and staff care. The document provides a snapshot of the entire process and detailed procedures for each scenario.

The Fire and Safety Procedures in this document have been approved by the London Fire Department and Western University Fire Department.

The information in this guide has been broken down into sections based on the fire scenario. Refer to the Table of Contents at the front of the document to locate the specific information.
**Definitions:**

**Building Emergency Coordinator: (BEC)** Responsible for recruiting and maintaining a group of people who will act as members of their Building Emergency Team. During an emergency they will liaison between the units and the emergency 911 personnel.

**Building Emergency Team: (BET)** Assist and co-ordinate a prompt and organized evacuation of all unit occupants to meet at the rally point. They will be identified by the blue vest. In the GAS Suites there are 2- the Surgical Prep Nurse and an Operating Room Nurse.

**Evacuation:** The Movement of patients and staff from a dangerous situation to a location of safety.

**General Anesthesia Suite: (GAS)**
Space occupied by a 3 bed Surgical Prep area, 2 Operating Rooms and a 3 bed Post Anesthetic Care Unit. Under the care of Surgeons, Anesthetists, Registered Nurses and other allied Professionals; patients are safely cared for while under general anesthesia.

**Horizontal Evacuation:** Movement to an adjacent zone on the same floor-in this case the Dental Reception area.

**Ontario Building Code: (OBC)**

**Operating Room Team:** Consists of Anesthetist, Surgeons, Operating Room Registered Charge Nurse, Scrub Member, Residents and Students.

**Post Anesthetic Care Unit:** A space staffed by Registered Nurses to care for patients following a surgical procedure hereby known as PACU. Maximum of three beds.

**Pull Station:** Device located outside both entry doors to the GAS to immediately enlist the Fire Departments response. Activated by pulling the lever down. All members of the GAS team have an obligation to activate the Pull Station should the situation be indicated.

**Rally Point:** This is the Main Dental Reception Area for the GAS. A place to meet to ensure all patients and staff are accounted for.

**Sheltering in Place:** A rapid means of effectively protecting patients and staff from a fire occurring outside of the General Anesthesia Suites by taking immediate shelter within the GAS.
**Stretcher: (Bed)** Both a method of transporting patients within the suites, a place for patients to lie down during surgical preparation and surgical recovery. Stretcher & Bed are used interchangeably within this document.

**Supervisory Staff:** GAS staff trained in Fire Safety and prevention. All employed GAS staff have accountability for safe and efficient patient and staff evacuation. Staff in situ at any given time is considered “supervisory staff”.

**Surgical Prep Area:** A space where Registered Nurses prepare patients to have the surgery completed. Maximum of three beds.
Fire, Safety and Evacuation Plan – Shelter in Place

Follow this Fire & Safety procedure when a general fire alarm is activated not within the General Anesthesia Suites.

Registered Nurse in Surgical Prep contacts Emergency Services
Dial 911

Communicate Following to 911:
- Location: Dental Building 0160H
- Observations-e.g. smell smoke etc.
- Number of staff and patients within suite (check daily Assignment sheet )
- Unit will “Shelter in Place”

Surgical Prep Nurse communicates the alarm activation to each Operating Room via telephone or delegation to the O.R. Aides, for the surgical team to “Shelter In Place”
The Blue Emergency Team Vest is donned to assist others if required

Reassure All Patients that the unit is designed to safely shelter them within the GAS. Their family members outside of the GAS will be evacuated safely with the rest of the dental staff. All Patients to remain inside of unit.

Bring Surgery to a point of safe completion and transport patients to PACU.

The Entire G.A.S. will await the “All Clear” from the fire officials to discharge patients
Fire, Safety & Evacuation Plan for Fire within O.R. Suites – Evacuation

The following Fire & Safety procedure is followed when fire occurs within the General Anesthesia Suites.

All GAS staff has a responsibility to activate or delegate the pull station when fire is discovered. Delegation is to be directed to the staff member closest to the exit doors.

**Background:** The GA Suite consists of an eight bed unit-two Operating Rooms, three Surgical Prep stretchers and three Post Anesthesia Care stretchers. The method of patient evacuation will be stretchers, wheelchairs or ambulatory movement at the discretion of the Registered Nurses in each area to evacuate efficiently and effectively. The GA Suites will be open from 0800-1800 and may have up to a maximum of 8 patients at any one time with a maximum of 6 non ambulatory patients. At no time should a patient be expected to evacuate the GAS on their own without specific guidance. On a daily basis, the GA Suites will be staffed with Surgeons, Anesthetists, Nurses and Operating Room Aides.

**Responsibilities of General Anesthesia Suite Members**

**Operating Room Aids**

- Obtain two portable Oxygen tanks and place outside of each O.R. door.
- Go to Surgical Prep area.
- Direct and evacuate all patients waiting for surgery in the Surgical Prep area through the adjacent door to the Rally Point at the Main Reception. Area. Use wheelchairs as necessary for patient care.
- At no time is a patient required to evacuate without direction or assistance.
- Go to Post Anesthetic Care Area when all Surgical Prep patients are evacuated.
- Under the direction of the Registered Nurse, assist with PACU evacuation via stretcher of the least vulnerable patient recovering from surgery.
- Following the evacuation of the least vulnerable PACU patient, the O.R. Aide remains with the PACU Nurses and patients at the Rally Point.
- Post evacuation from the GAS, obtains an extra Oxygen tank from the Main Dental Clinic for potential use at the Rally Point.
- Awaits further instructions from Fire Department.
- Ensure when the last patients are evacuated the GAS exit doors are completely closed.
**Surgical Prep Nurses**

- Direct O.R. Aide staff with the evacuation of the ambulatory patients within Surgical Prep via wheelchair or by walking.
- Dons the Blue Building Emergency Building Vest. Found in the Fire & Safety Manual on shelf above the Nurse’s desk. **CALL 911**
- Assist PACU Nurse with evacuation of the second most vulnerable post-operative patient via stretcher to the Rally Point.
- Following the evacuation of PACU remains with the Nurses and patients at the Rally Point outside of GA Suite.
- Ensure all patients under PACU’s care are present and accounted for
- Do not reenter GAS.

**Post Anesthetic Care Nurses**

- Under your direction, the OR Aide removes the patient designated as the least vulnerable via stretcher or wheelchair.
- Obtain Portable Oxygen Tank for those patients who require one for evacuation.
- Under your direction, the Surgical Prep nurse will remove the next vulnerable patient via stretcher.
- You evacuate to the Rally Point with the most vulnerable patient via stretcher.
- Upon arrival to the Rally Point ensure all patients are accounted for
- Do not reenter the suite.
- Await further instructions from the Fire Department.

**Operating Room Suite Staff**

- Communicate to Surgical Team the need to evacuate immediately.
- Charge Nurse directs a student or resident to obtain stretcher from outside of Operating Room Door.
- Surgeon immediately and safely stops surgery and assists with transfer of patient to stretcher.
- Scrub Team Member brings the portable Oxygen tank left by the OR Aides into the OR.
- Anesthetist takes charge of moving anaesthetized patient onto the stretcher and evacuates to the Rally Point outside of the GA suite.
• The OR Charge nurse dons the Blue BET Vest located within the OR if time permits.
• Upon arrival at rally point the Anesthetist, the Surgeon and the Charge Nurse are responsible to ensure their team members are present and accounted for.
• Await any further evacuation instructions from Fire Services.

Monthly Tasks

The GAS Fire Plan and Evacuation procedures must be reviewed with the GAS team on a monthly basis. This may be completed either with “Table Top” discussions or “Silent” drills.

Table Top: Using the following scenarios staff discuss each of their roles in order to evacuate patients safely and efficiently to the rally point.

Silent Drills: Using the following scenarios staff actively participate in a practice evacuation within the 2 min 25 second allotted time period. This may or may not be done with the assistance of the Western Fire Department.

Scenario 1: There are two Operating Rooms are in use. Three patients are in the prep area and three patients are in the PACU unit. The patient that is ready for discharge in the PACU area lights a cigarette that he has hidden in his clothes. A fire is noticed in the garbage can and is spreading up the drapes beside the bed. The PACU nurse sees the fire, delegates the activation of the pull station to the nearest team member and begins the evacuation procedure as described on pages 7, 8 & 9.

Scenario 2: There are two Operating Rooms are in use. Three patients are in the prep area and three patients are in the PACU unit. One patient is ready for discharge in the PACU area and one patient has just arrived in the Prep area. The scrub team member in OR 1 notices that the electrocautery unit has sparked and fire is seen rising up the nursing tower. The Charge Nurse notifies the entire room, delegates the nearest staff member to activate the pull station and announces to the unit to initiate the evacuation procedures as outlined on pages 7, 8 & 9.
**Documentation:** All training records will be kept in the Fire & Evacuation Plan Manual kept on the shelf above nursing desk in the GAS at all times.

Monthly Records will include

- Training Dates
- Method of Review - Table Top or Silent
- Responsible Supervisor
- Staff signed Attendance records
Yearly Tasks

During the month of August annually, the GAS staff team must perform a “Comprehensive “Fire Drill. **This must be completed prior to the end of the month that the drill occurred the previous year. It is the responsibility of the GAS to contact and initiate the drill.**

The London Fire Department Representative for Western University and the Western Fire Representative must be contacted the first week of August to set the date for the Drill.

Both the Western Fire Services and the London Fire Department must witness the drill.

The GAS, including the 2 Operating Room Suites, 3 Surgical Prep Beds and the 3 PACU beds must be evacuated in 2 minutes and 25 seconds or less, in order to meet fire code.

- All Trained Supervisory GAS staff must participate
- Accurate Attendance Records must be maintained
- Building Emergency Coordinators (BEC) must be assigned
- Building Emergency Teams must be in place
- Fire and Safety and Evacuation Plans must be in place and maintained within the unit; they are located in the Fire Safety Manual (Binder) at the Nurse’s desk in the GAS.
- Post yearly updated Fire & Safety procedures within each O.R. and the main nursing desk for review and understanding.
Contacts

Mary-Elizabeth Jones
Dental Sciences Building Rm. 0160G
London Ontario N6A 3K7
Phone 519-661-2111 ext. 86560
E-mail: mary-elizabeth.jones@schulich.uwo.ca

Mark Widmeyer, Mgr. Manager, Fire Safety
Western University | Graphics Building Rm 123
London, ON | N6G 1G9
Phone: (519) 661 2111 Ext. 88266
E-mail: mwidmey@uwo.ca

Western-LFD Liaison Fire Prevention Inspector, London Fire Department
400 Horton Street East
London, ON | N6B 1L7
Phone: (519) 661 2500 Ext. 8434
Fax: (519) 661 8419
7. Supervisory Staff

- Security
- Western Special Constable Service
- Western Fire Safety
- Building Emergency Coordinator (BEC)
- Building Emergency Team members (BETs)
8. Responsibilities

Building Emergency Team (BET)

Building Emergency Teams are present in most buildings on campus. It is the function of the Building Emergency Team to assist and coordinate a prompt and organized evacuation of all building occupants in the event of an emergency. If members are in their designated area, they are to begin a sweep of the area and encourage everyone to exit and meet at the designated rally point. If members are not in their area, or they cannot get to their area, they are not to go back to do a sweep. Instead, members are to leave via the nearest exit and report this information to an official outside.

In the event of an emergency:

- Don your Building Emergency Team vest.
- Take your keys, coat, and any important information with you.
- Search your floor if you can do so safely.
- Encourage all occupants to close windows and doors to their area, and evacuate the building.
- As you leave the building, inform other occupants that they should be evacuating.
- If you know of persons who did not evacuate, notify the Building Emergency Coordinator or emergency personnel where these individuals are located upon exiting the building.
- If you see signs of smoke and/or fire, or any other emergency situation, react accordingly and report this information to your Building Emergency Coordinator and/or emergency personnel.
- If you feel confident in the operation of a fire extinguisher, and you feel it is safe to do so, first ensure the building fire alarm is activated, and then try to extinguish the fire. If you do not feel comfortable using a fire extinguisher, evacuate the fire area and ensure the building fire alarm is activated.
Building Emergency Coordinator (BEC)

The Building Emergency Team (BET) is coordinated by the Building Emergency Coordinator (BEC). The Building Emergency Coordinator has the task of recruiting and maintaining a group of people who will act as members of their Building Emergency Team. During an Emergency evacuation, the BEC will proceed to a designated meeting place to await the arrival of the responding Emergency Services. The BEC will liaise with other Building Emergency Team members in order to determine any pertinent information about the emergency. Such information may include: areas of the building which have been searched, locations of people in the building, cause of the alarm, cause of the fire, signs of smoke or fire, or any other information which they deem important for responding Emergency Personnel. The BEC will relay this information to the incoming agencies and act as a liaison. An additional duty of the BEC is to inform other team members, upon the instructions from the Incident Commander be it Police, Fire or Other, that the building can be re-occupied. In the case that it is not possible to re-occupy the building, it is the duty of the BEC to relay to other team members that they will be required to move to the pre-determined temporary shelter building.

All Building Emergency Team members and Building Emergency Coordinators are issued vests which are to be donned in the event of an emergency. These vests assist responding Emergency Agencies as well as building occupants in identifying their designation as Building Emergency Team members.
Supervisors

- Keep the doors in fire separations closed at all times.
- Ensure that the doors to stairways are kept closed at all times (or will close on activation of a fire alarm)
- Keep access to exits and exit doors, inside and outside, clear of any obstructions at all times.
- Ensure that stairways, landings, hallways, passageways, and exits, inside and outside, are kept clear of any obstructions at all times
- Ensure that combustible materials are not accumulated in any part of a stairway, fire escape or other means of egress, or near elevator and ventilation shafts
- Ensure that combustible waste materials do not accumulate in locations that may constitute an undue fire hazard
- Promptly remove all combustible waste from your area.
- Keep access roadways, fire routes and fire department connections clear and accessible for fire department use.
- Participate in fire drills.
- Have a working knowledge of fire alarm procedures and the building fire and life safety systems.
- Ensure the building fire and life safety systems are in operating condition.
- Maintain fire protection equipment visibility and access
- Arrange for an alternate person to be responsible for your duties in the event of your absence
- Comply with the Ontario Fire Code.
**Kitchen Staff**

**Kitchen Suppression Systems**

**Maintenance:**

Hood Cleaning Maintenance for Kitchen Staff:

1) All exhaust hood surfaces and filters, appliance surfaces and surrounding equipment shall be kept clean and free of grease, dirt and oil build up.
2) Cleaning shall be performed at least monthly, and weekly where deemed necessary.
3) Hood wash down systems shall be kept in good working order and, where applicable, shall be operated after each cooking cycle.
4) Wash down degreaser shall be checked weekly and replaced as necessary.

**Operation:** The system operates automatically and manually.

Automatically, when a preset temperature is reached in the exhaust hood, a thermal device will melt causing the suppression system to activate.

Manually, when a kitchen specific (silver) pull station is activated causing the suppression system to activate.

Once activated, the kitchen suppression system will:

1) Dispense the extinguishing agent (soapy water) from all the nozzles located throughout the systems coverage area
2) Activate the building’s fire alarm system.
3) Possibly activate/de-activate exhaust fans/wash downs/local alarms.
4) All fuel sources to cooking appliances will automatically shut down.

If the **kitchen suppression system** is activated (automatically or manually):

- Remove person(s) from the area.
- Activate building fire alarm system via a pull station (if not automatically activated).
- Exit the building, wait for emergency personnel to arrive.
- Be available to tell emergency responders the nature of the emergency.
- Do not attempt to extinguish the fire.

** Prior to using a K type fire extinguisher activate the kitchen extinguishing system to avoid electrocution. **

** Cooking operations shall be suspended until the commercial cooking fixed extinguishing system is restored. **
When the **building fire alarm** sounds, kitchen staff will:

- Turn off all cooking appliances.
- Remove person(s) from the area.
- Close all doors.
- Exit the building; go to your designated waiting area.
Western Fire Safety

Western Fire Safety has numerous responsibilities related to fire safety and must ensure that the following measures are enacted:

- Establishment of emergency procedures to be followed at the time of an emergency.
- Instruction of supervisory staff and other occupants so that they are aware of their responsibilities for fire safety.
- Conducting fire drills in accordance with the Ontario Fire Code, incorporating Emergency Procedures appropriate to the building.
- Control of fire hazards in the building.
- Provisions of alternate measures for safety of occupants during shut down of fire protection equipment.
- Assuring that checks, tests and inspections as required by the Ontario Fire Code are completed on schedule and that records are retained for the required period.
- Ensure that the information in the Fire Safety Plan is current.
- Train sufficient building supervisory staff and alternates
- Maintain the provisions of the Fire Safety Plan.
9. Assembly Area(s)
The following table indicates the assembly areas for the building:

<table>
<thead>
<tr>
<th>MEDICAL SCIENCES BUILDING</th>
<th>Assembly Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENTAL SCIENCES BUILDING</td>
<td>Medical parking circle outside main entrance</td>
</tr>
<tr>
<td></td>
<td>Dental parking circle outside main entrance</td>
</tr>
<tr>
<td></td>
<td>University Community Centre</td>
</tr>
<tr>
<td>Secondary Shelter</td>
<td>Alumni Hall</td>
</tr>
</tbody>
</table>
10. Fire Drills

Campus fire drills are conducted in accordance with the Ontario Fire Code. This Code states that a fire drill, for at least supervisory staff, must occur once per year in all buildings equipped with fire alarm systems, every six months in buildings that have laboratories that use flammable or combustible liquids, every three months in high rise buildings, and monthly for day-care facilities.

A fire drill is a tool that can be used to train employees who have supervisory duties, expose building occupants to fire evacuation procedures, identify concerns that affect the occupants’ ability to evacuate, and increase the general fire safety awareness among building occupants.

As the name implies, a fire drill is just that, a “drill”, or a “practice” that is conducted during a non-emergency time. Building occupants are given the opportunity to carry out any “fire alarm duties” assigned to them without the danger presented by an actual fire. Fire Drills also prove to be good practice for all Building Emergency Team members. This provides all occupants the opportunity to give feedback that can be used to alter and modify plans, routines and habits in an effort to make a real emergency as safe as possible.

A fire drill may also be used as a diagnostic tool that can help emergency planners understand the strengths and weaknesses of each building’s reaction to a fire alarm/emergency situation. These findings can then be used to make adjustments to fire safety plans, training programs, and future fire drills.

Fire drills identify to the occupants the audible and visual evacuation devices and emergency tones that are heard and seen during an alarm as well as reinforce the procedures that are to take place during an alarm.

Participation in fire drills is mandatory, and each person within a building is expected to evacuate when the fire alarm sounds.

Fire drills will be held at least annually in this building to ensure efficient execution of the Emergency Procedures. Fire drill records are required to be retained for a period of one year.
11. Fire Extinguishment/Control/Confinement

Ensure that the Fire Alarm System has been activated and that the Fire Department has been notified prior to an attempt to extinguish a fire. Only those persons who are trained and familiar with extinguisher operation should attempt to fight a fire. In the event that a small fire cannot be extinguished with the use of a portable fire extinguisher or the smoke presents a hazard for the operator, the door to the area should be closed to confine and contain the fire and the building should be evacuated.

**Portable Fire Extinguisher Operation**

Remember the acronym **P.A.S.S.**

**P** - Pull the safety pin

**A** - Aim the nozzle

**S** - Squeeze the trigger handle

**S** - Sweep from side to side (watch for fire restarting)

Never re-hang or put back extinguishers after they have been used. Ensure that discharged fire extinguishers are reported to Western Fire Safety and that a replacement extinguisher is provided.

Keep extinguishers visible and unobstructed.

Throughout campus there is signage posted indicating instructions pertaining to operation of fire protection equipment (Commercial Kitchen Suppression Systems, Special Fixed Extinguishing Systems, Fire Hose Stations, etc.) as well as directions to follow in the event of an emergency. The fire extinguisher procedure sign has been included in this plan. You should familiarize yourself with your building’s/area’s signage as well as the instructions provided. Contact Western Fire Safety for any further training.
12. Alternative Fire Safety Measures

Alternative fire safety measures will be implemented for any shutdown of fire protection equipment and systems or parts thereof. The London Fire Department will be notified of any shutdowns lasting longer than 24 hours.

All attempts to minimize the impact of malfunctioning equipment will be initiated. Where portions of a sprinkler or fire alarm system are placed out of service, service to remaining portions must be maintained, and where necessary, the use of fire watch personnel, radios, procedures, etc. will be employed to notify concerned parties of emergencies. Assistance and direction for specific situations are to be sought from Western Fire Safety.

Procedures to be followed in the event of shutdown of any part of a fire protection system are as follows:

1. Adhere to all relevant University policies and procedures.
2. The London Fire Department is to be notified by Western Fire Safety of shutdowns lasting longer than 24 hours.
3. When required, persons/occupants in affected areas will be notified by the means identified by Western Fire Safety.
4. When deemed necessary by Western Fire Safety staff, or other reliable person(s), will conduct a Fire Watch within the affected area(s). All normally occupied areas shall be inspected and a log will be maintained via radio communication with WSCS radio system logging.
5. Alternative notification system(s) may need to be employed to evacuate occupants at the request of Western Fire Safety or the London Fire Department.
6. During an emergency or unscheduled shutdown notify the Manager of Western Fire Safety (or designate) via WSCS Communications (519-661-3300). The notification is to be made by the employee or contractor creating the shutdown. Provide your name, address, phone number and/or location and a description of the problem including when you expect it to be corrected. Notify WSCS again when repairs have been completed and systems are restored to normal.

Note: All shutdowns will be confined to as limited an area and duration as possible.

All hazardous operations (labs working with flammable and combustible liquids and gases) should be suspended in non-protected areas due to shutdowns.
13. Special Event Procedures

All Special Events are to have fire and life safety procedures developed if the provisions of the approved fire safety plan cannot be met. All special event organizers are to develop these plans in conjunction with Western Fire Safety.

The following are examples of special event items that would require the need for special procedures:

- Blocked exits
- Large quantities of combustibles
- Large number of persons with a physical disability
- High profile speaker(s)
- Change in building use
- Change in normal occupancy
- High occupancy loads

Check/Test/Inspect requirements of the Ontario Fire Code (OFC):

- Fire safety Officers check to ensure that the necessary checks, inspections, and/or tests are being completed, when conducting their inspections.
- This list has been prepared for the purpose of convenience only, for accurate reference please consult the OFC or Western Fire Safety.
- The OFC states that records of all tests (and corrective measures required) be retained for a period of two years. For all documented records contact Western Fire Safety.
- All maintenance and testing of building fire and life safety systems are the responsibility of Western Fire Safety.
General Fire Protection Systems/Equipment

General

- Fire hydrants shall be readily available and unobstructed for use at all times
- Doors in fire separations are to be checked as frequently as necessary to ensure that they remain closed
- Exit signs are to be clearly visible and maintained in a clean and legible condition
- Internally illuminated exit signs are to be kept clearly illuminated at all times when the building is occupied

Weekly

- When subject to accumulation of combustible deposits, hoods, filters, and ducts are to be checked weekly and be cleaned when such deposits create an undue fire hazard

Monthly

- Doors in fire separations are to be inspected monthly for proper operation

Yearly

- Hydrants shall be inspected annually after each use
  - Ensure hydrants are equipped with port caps, secured wrench tight. The port caps shall be removed annually and inspected for wear, rust, or obstructions
  - The hydrant barrel shall be inspected annually to ensure that no water has accumulated
  - The drain valve shall be inspected for operation if water is found in the hydrant barrel when main valve is closed
  - Hydrant water flow shall be inspected for operation annually and a record shall be kept
  - Yearly inspection and maintenance of hydrants is the responsibility of the City of London
- Fire dampers and fire-stop flaps are to be inspected annually, or based on a schedule, via contractor, acceptable to the Chief Fire Official
- Every chimney, flue and flue pipe are to be inspected annually and cleaned as often as necessary to keep them free from accumulations of combustible deposits
- Disconnect switches for mechanical air-conditioning and ventilating systems are to be inspected annually to establish that the system can be shut down
- Spark arresters are to be cleaned annually or more frequently where accumulations of debris will adversely affect operations. Burnt-out arresters should be repaired or replaced
Commercial Cooking Equipment

Commercial cooking equipment exhaust and fire protection systems shall be maintained in conformance with NFPA 96 “Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations” by a proper trained and qualified person(s) at least every 6 months.

Portable Fire Extinguishers

General

- Each portable extinguisher is to have a tag securely attached to it showing the maintenance or recharge date, the servicing agency, and the signature of the person who performed the service
- A permanent record containing the maintenance date, the examiner’s name, and a description of any work or hydrostatic resting carried out is to be prepared and maintained for each portable extinguisher
- All extinguishers are to be recharged after use or as indicated by an inspection or when performing maintenance. When recharging is performed, the recommendations of the manufacturer are to be followed

Monthly

- Portable fire extinguishers are to be inspected monthly

Yearly

- Extinguishers are to be subject to maintenance not more than one year apart or when specifically indicated by an inspection
- Maintenance procedures are to include thorough examination of the three basic elements of an extinguisher:
  - Mechanical parts
  - Extinguishing agent
  - Means of expulsion

5 Years

- Every five years, pressurized water and carbon dioxide extinguishers are to be hydrostatically tested.

6 Years

- Every six years, stored pressure extinguishers that require a 12 year hydrostatic test are to be emptied and subjected to the applicable maintenance procedures
Fire Alarm

General

- Fire alarm and voice communication system components are to be kept unobstructed
- Fire alarm control and annunciator panels are to be kept unobstructed
- Fire alarm system power supply disconnect switches are to be locked on in an approved manner

Daily

- The following daily checks should be conducted, and if a fault is established, appropriate corrective action should be taken
  - The fire alarm panel is monitored 24/7 by Security for any alarms, faults, or trouble which will result in the immediate dispatch of persons to investigate.

Monthly

- Every month the following tests are to be conducted under battery back-up power and if a fault is established, appropriate corrective action if to be taken:
  - One manual fire alarm initiating device is to be operated, on a rotating basis, and should initiate an alarm condition
  - Function of all signal devices should be ensured
  - The annunciator panel is to be checked to ensure correct annunciation
  - Intended function of the audible and visual trouble signals are to be ensured
  - Fire alarm batteries are to be checked to ensure that:
    - Terminals are clean and lubricated where necessary
    - Terminal clamps are clean and tight
    - Electrolyte level and specific gravity, where applicable, meet manufacturer’s specification
  - Voice paging capability to one zone is to be tested monthly on a rotational basis
  - One emergency telephone is to be tested monthly on a rotational basis for operations and correct indication at control unit
  - Loudspeakers are to be tested monthly as an all-call signal to ensure they function as intended
  - At least one firefighter’s emergency telephone is to be tested monthly, on a rotational basis to ensure communication with the control unit. All telephones are to be tested each year

Yearly

- Yearly tests are to be conducted by a certified fire alarm technician as required by The Ontario Fire Code. Tests should be in conformance with CAN/ULC S536, “Inspection and Testing of Fire Alarm Systems”.
• Voice communications between floor areas and the central alarm control facility are to be tested annually, as required for fire alarm initiating and signalling devices.

**Standpipe Systems**

**Monthly**

• Hose cabinets are to be inspected monthly to ensure that the hose and equipment are in the proper position and appear to be operable

**Yearly**

• Plugs or caps on Fire Department connections are to be removed annually and the threads inspected for wear, rust, or obstruction. Re-secure plugs or caps wrench tight.
• If plugs or caps are missing, examine the Fire Department connections for obstructions, back flush is necessary, and replace plugs or caps
• Hose valves are to be inspected annually to ensure that they are tight and that there is no water leakage into the hose
• Standpipe hose is to be re-racked annually and after each use. Any work gaskets in the couplings, at the hose valve, and at the nozzle should be replaced.
Sprinkler System (Wet)

General

- Auxiliary drains are to be inspected as required to prevent freezing

Weekly

- Except for electrically supervised valves, all valves controlling water supplies to sprinklers and alarm connections should be checked weekly to ensure that they are sealed or locked in the open position
- Water supply pressure and system air or water pressure should be checked weekly by using gauges to ensure that the system is maintained at the required operating pressure

Monthly

- On all sprinkler systems, an alarm test, using the alarm test connection located at the sprinkler valve, should be performed monthly

Two Months

- All transmitters and water flow devices should be tested at two month intervals

Six Months

- Gate-valve supervisory switches and other sprinkler system supervisory devices should be tested at six month intervals

Yearly

- Exposed sprinkler piping hangers should be checked yearly to ensure that they are kept in good repair
- Sprinkler heads should be checked at least once per year to ensure that they are kept in good repair
- Sprinkler heads should be checked at least once per year to ensure that they are free from damage, corrosion, grease, dust, paint, or whitewash. They are to be replaced where necessary as a result of such conditions
- On wet sprinkler systems, water-flow alarm test, using the most hydrostatically remote test connection, should be performed annually
- Sprinkler system water pressure should be tested annually or after any sprinkler system control valve has been operated, with the main drain valve fully open, to ensure that there are no obstructions or deterioration of the main water supply
- Plugs or caps on Fire Department connections should be removed annually and the threads inspected for wear, rust, or obstruction. Re-secure plugs or caps wrench tight. If plugs or caps are missing, examine the Fire Department connection for obstructions, back flush if necessary and replace plugs or caps
Emergency Lighting System

Daily

- Check pilot lights for indication of proper operation

Monthly

- Batteries should be inspected monthly and maintained as per manufacturer’s specifications
- Ensure that the battery surface is clean and dry
- Ensure that the terminal connections are clean, free of corrosion and lubricated
- Ensure that the terminal clamps are clean and tight as per manufacturer’s specifications
- Emergency lighting equipment should be tested monthly to ensure that the emergency lighting will function upon failure of the primary power supply

Yearly

- Emergency lighting equipment should be tested annually to ensure that the units will provide emergency lighting for duration equal to the design criteria under simulated power failure conditions
- After completion, the charging conditions for voltage and current and the recovery period will be tested annually to ensure that the charging system is in accordance with the manufacturer’s specifications
Emergency Power Systems

General

- Emergency power systems should be inspected, tested and maintained in conformance with CSA C282, “Emergency Electrical Power Supply for Buildings”.
- To ensure continued reliable operation, the emergency power supply equipment should be operated and maintained in accordance with manufacturer’s instructions
- At least two copies of the instruction manual should be maintained

Monthly

- The emergency electrical power should be completely tested monthly as follows:
  - Simulate a failure of the normal power supply
  - Arrange so that:
    - An engine generator set operates under at least 30% of the rated load for 60 minutes and;
    - All automatic transfer switches are operated under load
  - Include an inspection for correct function of all auxiliary equipment such as radiator shutter control, coolant pumps, fuel transfer pumps, oil coolers, and engine room ventilation controls
  - Record all instrument readings associated with the prime mover and generator and verification that they are normal
  - Log and report as further prescribed in the manual of instruction for operation and maintenance
  - Check fuel supply for sufficient quantity

Annually

- Test the generator, control panel, and transfer switch in conformance with CSA C282, “Emergency Electrical Power Supply for Buildings”.

15. Fire Alarm System and Device Information

Edwards EST 3
Single Stage, Conventional/Addressable Mixed, Networked

Automatic Devices:
- Heat detectors
- Smoke detectors
- Duct detectors
- Sprinkler heads

Manual Devices:
- Manual Pull Stations