

This policy does not replace or supersede the EMTALA policy.

I. PURPOSE

To provide a method for gathering the personnel and equipment necessary to manage any individual who has cardiac arrest, respiratory arrest or other medical emergency.

II. POLICY

Skilled emergency treatment will be provided for individuals who suffer cardiac arrest, respiratory arrest, or other medical emergency by summoning trained personnel and specialized equipment to the scene as quickly as possible.

A Code Blue emergency shall be initiated on any patient who experiences a sudden cessation of vital signs or is in a sudden and unexpected life threatening situation unless there is a written order of limited resuscitation or no resuscitation. The written order should be documented on either the “code status order form” or a standard physician order form. The appropriateness of the No Resuscitation Measures (NRM=DNR – Do Not Resuscitate) and Limited Resuscitation Measures (LRM) orders should be re-evaluated on an ongoing basis and revised as the patient/guardian wishes or condition warrants. The code status should be reviewed every thirty days for patients in TCU, or whenever the condition of the patient changes. It is recommended that upon admission, the attending physician, the resident physician in consultation with the attending physician or when appropriate, the consulting physician will document the code status on either the “code status order form” or a standard physician order form. However, when unsure of the Code Blue status of a patient, initiate the Code Blue.

Families of patients will be kept updated on patient’s condition. Family presence during a Code Blue will be evaluated based on each situation. When it is appropriate, family members will be encouraged to be present during resuscitation efforts and will be accompanied by health care personnel who can provide support, explain what is transpiring, and answer questions.

UnityPoint Health - Des Moines (Iowa Methodist Medical Center - IMMC, Blank Children’s Hospital - BCH, Iowa Lutheran Hospital – ILH and Methodist West Hospital - MWH) staff respect the patient or parent/legal guardian’s rights to accept or refuse resuscitative measures within appropriate legal parameters. UPHDM Policy 004 addresses advance directives. UPHDM Policy 005 describes the conditions for withdrawing or withholding life sustaining treatment. UPHDM Policy 009 defines Determination of Death.

III. DEFINITIONS

- A. AED – Automated External Defibrillator
- B. Code Blue - Activation of the response team upon discovery of any individual who has suffered a sudden cessation of vital signs or is in a sudden and unexpected life-threatening situation.
- C. Family - relatives and/or other significantly important persons as defined by the patient.
- D. Limited Resuscitation Measures (LRM)
The physician's order must specify what measures are to be taken or withheld, such as:
 - 1. Intubation
 - 2. Mechanical ventilation
 - 3. Administration of medications
 - 4. CPR
 - 5. Defibrillation
- E. No Resuscitation Measures (NRM = DNR)
No resuscitation effort will be undertaken in the event of a cardiac and/or respiratory arrest.

IV. PROCEDURES

A. Hospital Inpatients

BLS trained personnel in the code area will be responsible to start CPR and designate others to activate the code team and bring a defibrillator and/or crash cart when an individual becomes unresponsive and pulseless.

- 1. Activation of the Code Team:
 - a. The code blue team is activated by calling 777 from a land line phone. The code blue team can also be activated by calling 241-7777 from any cell phone.
 - b. If 911 is called from a land line, the caller will be routed to the 777 ECC (UnityPoint Health – Des Moines Emergency Communication Center) not the community EMS (Emergency Medical Services).

2. Emergency Announcement

a. Adult Codes

The ECC uses the overhead paging system to announce “Attention please, there is an adult Code Blue (gives location including floor level, wing name, and room number: e.g. 3 East, Room 331)”. The announcement is repeated three times. The ECC will also page an approved list of adult Code Blue responders.

b. Pediatric Codes

The ECC uses the overhead paging system to announce “Attention please, there is a pediatric Code Blue (gives location including floor level, wing name and room number; e.g. 2 North, Room 235)”. The announcement is repeated three times. The ECC will also page an approved list of pediatric Code Blue responders.

3 Code Team and Areas Covered

a. Adult Code Team will consist of the following:

- Family Practice Resident Emergency Department Physician, Hospitalist, or Credential Group 1 Allied Health Professional (PA, ARNP), if available.
- ED Nurse or Paramedic
- Critical Care Nurse
- Patient Care Coordinator or Patient Care Facilitator
- Respiratory Therapist
- Transporter or Patient Care Tech

b. Pediatric Code Team will consist of the following

- Family Practice Resident, Emergency Department Physician, Hospitalists, or Credential Group 1 Allied Health Professional (PA, ARNP) if available.
- Critical Care Nurse
- ED Nurse/Paramedic
- Patient Care Coordinator or Patient Care Facilitator
- Respiratory Therapist
- Transporter or Patient Care Tech

c. When available the following will respond to codes:

- UnityPoint Health EMS Alliance
- Chaplain or Social Worker
- Life Flight
- Attending Physician
- Pharmacist
- Pediatric Transport

d. Special Circumstances

- For any circumstance where the Family Practice Resident is unavailable for a Code at Iowa Lutheran Hospital, the Critical Care Nurse will assume the team leader role until relieved by Family practice Resident or other qualified personnel. The Code team may call to the Emergency Department to speak with the Emergency Department physician to collaborate the plan of action.

- Codes at OR, PACU, Cath Lab and ED

Most codes in these areas are handled internally. If additional assistance is required, 777 will be activated. The responding code blue team will report to the main desk, and the staff will determine which members are needed in the room

- Codes in the MRI Suite

If a patient arrests or has a pre-arrest event while in the MRI, the MRI Technician will:

1. Stop the procedure,
2. Call 777 to report the code,
3. Remove the patient from the MRI procedure room to the control room where the Code Team has clear access and
4. Begin CPR.

No employees or physicians are allowed to enter the procedure room without being screened by the MRI Technician even in emergency situations. Special caution must be used in the MRI area due to the strong magnetic field that remains in effect at all times in the MRI procedure room (preventing the entrance of a crash cart into the room).

B. Outpatients, Family Members, Visitors, and Employees

All non-inpatients, who experience an emergency medical condition on the hospital property, will be taken to the Emergency Department for screening, assessment and stabilization. The term "hospital property" means the entire main hospital campus, including parking lots, sidewalks, and driveways, and hospital departments, including any buildings owned by the hospital that are within 250 yards of the hospital. If the individual is competent and requests to be taken to another Emergency Department, the request will be honored by the local Emergency Medical Services. Biennially, the Emergency Medical Services Coordinator will notify Des Moines Metro Emergency Medical Services of hospital-owned buildings that are located within 250 yards of the hospital. *See maps on pages 13 and 14.*

GREEN ZONE – Load and Go

Green Zone:

1. Outpatients, Family Members, Visitors, and Employees in the Green Zone – “code team - load and go” (see maps on page 13-14)

BLS trained personnel in the code area will be responsible to start CPR and designate others to activate the code team and bring a defibrillator and/or crash cart when an individual becomes unresponsive and pulseless.

The code team will prioritize the need for a quick transfer to the Emergency Department or Coronary Intensive Care Unit (CICU) where the code can be run in a controlled setting. CPR and defibrillation will be started at the scene and CPR will be continued during transport.

All visitors, outpatients, and employees experiencing an emergency medical condition, will be a load and go to the Emergency Department (ED).

- a. Additional patient populations included in Green Zone – load and go

- Transitional Care Unit (TCU), Chemical Dependency Center (CDC) and Geriatric Behavioral Unit
 - i. Patients are load and go to the Emergency Department.
 - ii. Following the initiation of CPR and defibrillation if needed, the team leader will direct the code team for immediate transfer to the ED to manage the code in a controlled setting. CPR will continue during transport.
 - iii. TCU, CDC, Geriatric Behavioral patients will be discharged and readmitted to the inpatient unit.
- Adult Mental Health Unit
 - i. Patients are load and go to the Coronary Intensive Care Unit (CICU)
 - ii. Following the initiation of CPR and defibrillation if needed, the team leader will direct the code team for immediate transfer to CICU to manage the code in a controlled setting. CPR will continue during transport
 - iii. Adult Mental Health patients are transfer within the hospital rather than a new admission.
- Child/Adolescent Behavioral Health Unit
 - i. Patients will be a load and go to CICU or ED depending on the patient’s age and medical needs.
 - ii. Following the initiation of CPR and defibrillation if appropriate, the team leader will direct the code team for immediate transfer to the ED or CICU. CPR will continue during transport.

- b. Activation of the code team

The code blue team is activated by calling 777 from a landline. The code blue team can also be activated by calling 241-7777 from any cell phone.

If 911 is called from a landline, the caller will be routed to the 777 ECC (UnityPoint Health - Des Moines Emergency Communication Center) not the community EMS (Emergency Medical Services).

c. Emergency Announcement

◆ Adult Codes

The ECC uses the overhead paging system to announce “Attention please, there is an adult Code Blue (gives location including floor level, wing name, and room number: e.g. B Level, Cafeteria)”. The announcement is repeated three times. The ECC will also page an approved list of adult Code Blue responders.

◆ Pediatric Codes

The ECC uses the overhead paging system to announce “Attention please, there is a pediatric Code Blue (gives location including floor level, wing name and room number; e.g. first floor lobby)”. The announcement is repeated three times. The ECC will also page an approved list of pediatric Code Blue responders.

d. Code Team Personnel and Area Covered

The same individuals will respond to a code in the green zone as listed under the Hospital Inpatient with the following exceptions:

- An ED staff member will respond to all Code Blues on the main floor and lower levels with the exception of CICU Code Blues. The team leader will direct the code team and immediate transfer to the Emergency Department or CICU.

Additionally, an ED staff member will bring an AED and a CPR backboard and the transport/Patient Care Technician will bring a cart and oxygen tank

YELLOW ZONE – 911 and Staff Assist

Yellow Zone: Annex, Boiler Room, Lots 3, 4, 5, 9

2. Outpatients, Family Members, Visitors, and Employees in the Yellow Zone – 911 and staff assist (see maps on page 13-14)

BLS trained personnel in the code area will be responsible to start CPR and designate others to call 777 or 241-7777 when an individual becomes unresponsive and pulseless.

a. Activation of 911 EMS and assistive personnel

If 777 or 241-7777 is called for the yellow zone, the dispatcher will call 911 and page Public Safety and the ED charge nurse (adult or pediatric based on the victim).

If 911 is called directly from the yellow zone, the ECC dispatcher will not be able to activate assistive personnel.

b. Emergency Announcement

No overhead emergency announcement will be called.

c. Assistive Personnel and role

A Public Safety Officer will be dispatched to the Emergency Department via the Public Safety vehicle to pick up an ED staff member and take them to the scene.

The Public Safety Officer and ED staff member will provide basic life support measures (CPR and defibrillation) while waiting for the 911 EMS responders. The Public Safety vehicle is equipped with an AED. The 911 EMS responders will transport the victim to the Emergency Department.

RED ZONE – 911 only

Red Zone: East DSM Family Care Center, Former Iowa Heart Center, Penn Medical Place, Duplex, Lots 1, 2, 6, 7, 8, Grounds Building, Grassy Area

3. Outpatients, Family Members, Visitors, and Employees in the Red Zone – 911 only (see maps on page 13-14)

BLS trained personnel in the code area will be responsible to start CPR and designate others to call 777 or 241-7777 when an individual becomes unresponsive and pulseless.

a. Activation of the 911 EMS

If 777 or 241-777 is called for the red zone, the dispatcher will call 911 and page the public safety officer.

If 911 is called directly from the red zone, the ECC will not be able to notify the public safety officer.

b. Emergency Announcement

No overhead emergency announcement will be called.

c. Staff and Role

A Public Safety Officer will be dispatched to the scene if the ECC is notified. The Public Safety Officer can assist with CPR and defibrillation with an AED until 911 EMS arrives. The 911 EMS responders will transport the victim to the Emergency Department.

V. CODE TEAM RESPONSIBILITIES FOR INPATIENT AND GREEN ZONE CODES

All BLS trained staff will be responsible to recognize when a patient visitor or employee is experiencing a respiratory or cardiac arrest. Upon recognition of the event, the BLS trained staff will activate the code blue team and initiate CPR. The BLS rescuer will delegate another staff member to retrieve the crash cart or AED.

The following roles will be assumed during a code blue call. The responsibilities may be combined when minimal staff is available to respond.

A. Team Leader

1. Assumes responsibility for the medical management and comprehensive care of the individual in cardiac and/or respiratory arrest.
2. Organizes the team and delegates task to the appropriately trained team members.
3. Assures that the attending physician and family are contacted as soon as possible.
4. Serves as a backup for a team member who may be having trouble performing an assigned role.
5. Determines the timing for transfer of and accompanies the individual to the Emergency Department or Critical Care Unit.
6. Determines the appropriateness of family presence during the code.
7. Delegates additional roles as needed and as available; i.e. chaplain, life flight, etc.
8. Asks excess personnel to leave the room so the team can operate efficiently
9. Decides when to terminate efforts.
10. Signs the completed code blue documentation and enters a significant event note within EPIC to document the code and patient outcome/disposition.

The Family Practice Resident, or Emergency Department Physician, Hospitalist, or Credentialed Group 1 Allied Health Professional (PA/ARNP) if available will serve as the team leader.

The critical care nurse, or ED nurse may serve as the team leader operating under ACLS/PALS protocols in the absence of the resident, credentialed physician, or credentialed Group 1 Allied Health Professional (PA/ ARNP).

The attending physician may assume the team leader role at any facility.

C. Airway Manager

1. Establishes and maintains a patent airway.
2. Supports ventilation and oxygenation.
3. Notifies team leader when the airway is not patent.
4. Assesses the need for intubation and performs and/or assists with the intubation procedure.

The respiratory therapist will serve as the airway manager. Intubation will be performed by qualified personnel. The primary nurse, critical care nurse, ED nurse, or paramedic may serve as the airway manager operating under BLS protocols until the arrival of the respiratory therapist.

D. Compressor

1. Provides compressions according to BLS protocol.

Any BLS trained staff will serve as a compressor. This responsibility can be rotated among the team members.

E. Defibrillator & Monitor Manager

1. Connects patient to AED/Defibrillator.
2. Delivers electrical shock according to BLS/ACLS/PALS protocol or as directed by the team leader.
3. Maintains electrical safety by clearing team prior to discharging defibrillator.

BLS trained staff may operate an AED/Shock Advise Machine prior to the arrival of the code team. The critical care nurse, ED nurse, or paramedic will serve as the defibrillator/monitor manager.

F. IV & Medication Administrator

1. Establishes and maintains a patent intravascular line.
2. Notifies team leader when unable to obtain intravascular access.
3. Assesses the need for intraosseous or central line placement and assists with the procedure.
4. Administers medications and fluid boluses under the team leader's direction.
5. Confirms with the team leader appropriate drug and dose. Clarifies with the team leader any medication or dose that is outside of ACLS/PALS protocol.
6. Notifies team leader and recorder after each medication is administered.

The critical care nurse/ED nurse/paramedic will serve as the IV/Medication Administrator. Medications may be administered by a qualified personnel team member according to ACLS/PALS protocols until the arrival of the resident/physician. Intraosseous or central line placement will be performed by qualified personnel.

G. Recorder

1. Records assessments and interventions on the code blue record.
2. Clarifies information with team as needed.
3. Reviews the record for completeness and obtains appropriate signatures at the completion of the code.

The PCC or Patient Care Facilitator will serve as the Recorder. The floor nurse, nurse manager, or other members of the code team may serve if the PCC or Patient Care Facilitator is unavailable.

H. Gatekeeper/Communicator

1. This role is assigned by the team leader. The role may be assigned to any individual (PCT, Chaplain, Security, etc.)
2. Establishes communication between the Team Leader and arrival of team members.
3. Coordinates the members outside of the room and controls the number of people in the room.

VI CRASH CART AND AED LOCATIONS

A. Crash carts are available on all inpatient care areas with the following exceptions:

TCU – has AED.
BHU – have AEDs.
CDC (1N) – has AED

B. Crash carts are also available in the following areas:

Emergency Department
Radiology
Operating Room
Nuclear Medicine
Cardiac Cath Lab
PACU
Cardiac Rehab

C. AEDs are available as follows:

Cafeteria
One in each public vehicle
Behavioral Health: Level 1 CDC, 1 East, 2 East
TCU
Adult ED

VII. DOCUMENTATION

Adult Code Blue activities are documented in the Code Narrator of the EMR. The paper form of the code blue record will be used if the recorder is unable to access the EMR. The paper forms will be located on a clipboard on the crash cart and additional forms can be obtained from the print shop.

The recorder will document information as completely as possible. It is the responsibility of each team member to communicate procedures, drugs, treatments, etc. to the recorder. The completed paper form of the Code Blue record or EMR code blue documentation will be signed by the team leader and, if required, cosigned by a physician. The original paper Code Blue record becomes part of the patient's medical record. If an AED was used, data will be downloaded and become part of the patient's record.

The team leader or recorder may document any equipment or personnel problems that occurred during the code on the evaluation form. These forms are located on the crash cart. The evaluation form is sent to the respective Critical Care Nurse Managers and Adult ED Manager. The managers review and resolve equipment and nursing personnel problems. For adult codes, physician, resident, or respiratory therapy personnel problems are referred to the physician chair of the Adult Acute Care Committee for follow up. For pediatric codes, personnel problems are referred to the Pediatric Code Blue Committee for follow up.

When the Public Safety officer responds to a Code Blue, the officer will complete a Public Safety Incident report.

VIII. MAINTENANCE

- A. Pocket masks or bag/valve masks and gloves shall be available in every patient room.
- B. Testing of defibrillators/AEDs and checking of code carts are the responsibility of the unit where they are located. The code cart lock and Defibrillator/AED are checked daily during hours of service. Contents of the code cart, including medications, are after each opening. Content outdates, including medications, are checked every month.
- C. Facilities management will check all public area AEDs once a week for the green check, availability of current pads, and the accessory pack except for the AEDs in public safety vehicles. A Public Safety Officer will check public safety's AEDs once a week for the green check, availability of current pads, and the accessory pack. Replacement supplies are obtained from Central Supply.
- D. Bio-Tech Services is responsible for checking all defibrillators/AED's for function and safety twice yearly and when problems are reported.
- E. A supervisor or manager from the Critical Care Unit will download data from the AEDs.
- F. The expiration dates will be checked monthly on all medications in the crash cart by a pharmacist, a pharmacy tech or a designated unit staff member.

- G. Crash Carts are exchanged from Central supply-with the exception of ILH ED. The Manager of each department or his/her designee is responsible for assuring that the cart is checked, supplied, and relocked after each use. When a code cart is out of service, the unit/department is responsible for notifying the nearest unit/department for coverage until their cart is back in service.
- H. The list of medications and supplies for the crash carts is reviewed annually by the Adult Acute Care Committee and the Pediatric Code Blue Committee. Crash cart checklists are standardized for all carts. Carts in special areas may add supplies as deemed necessary for their unique needs.

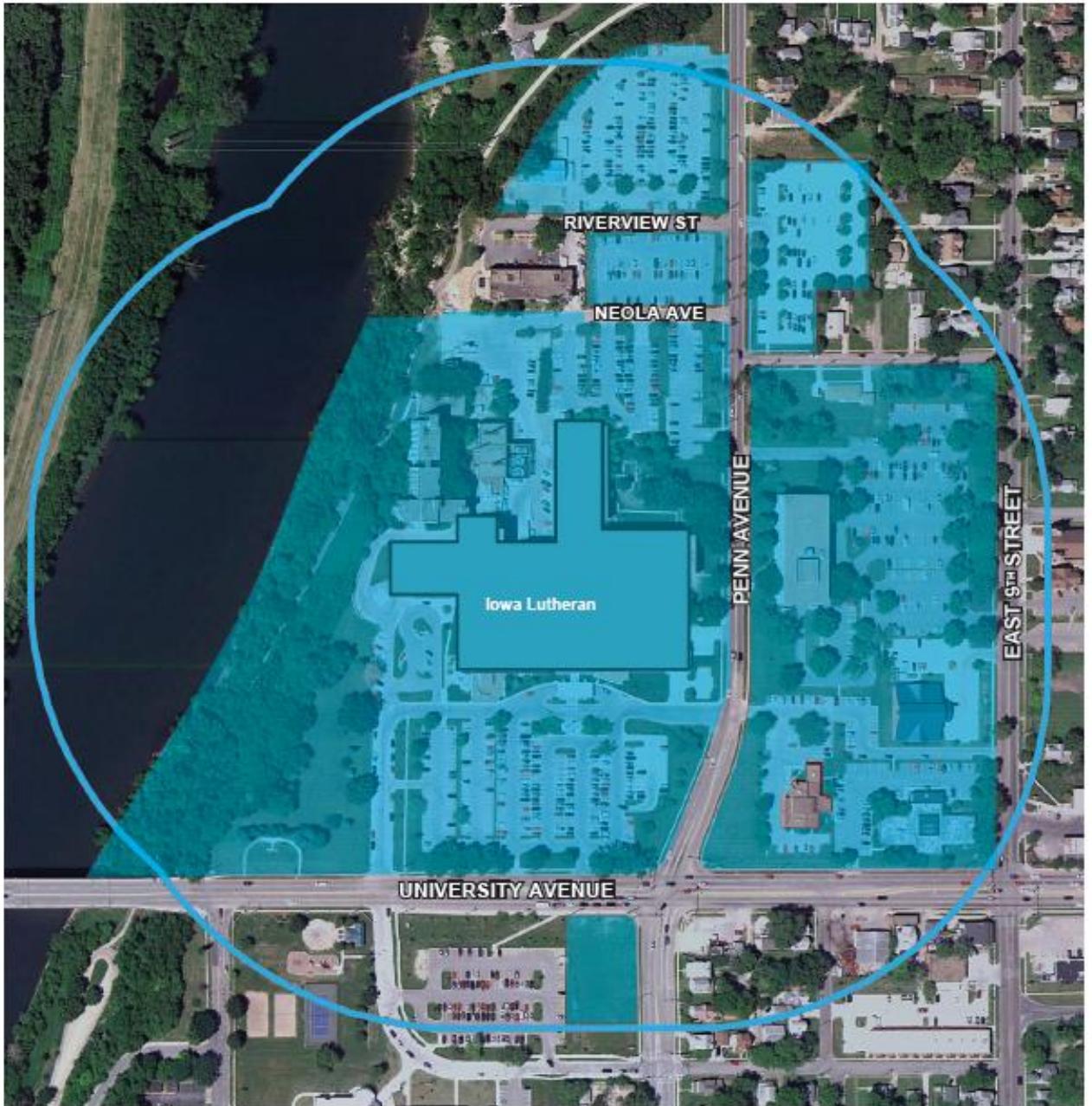
IX. EDUCATION

- A. Non-licensed personnel who provide direct patient care including public safety officers must maintain current CPR certification at the minimal level of Heartsaver AED (Adult and Pediatric). Managers may require the higher level of Healthcare Provider Certification, based on departmental needs.
- B. RNs, paramedics, respiratory therapist, credentialed Goup1 Allied Health Professions (PA, ARNP) and residents must maintain current CPR certification at the Healthcare Provider level.
- C. The AED is intended for use by personnel who have been trained in CPR.
- D. The following staff shall be current with ACLS and/or ACLS OB as required in their area and/or complete an Adult MegaCode review as required in their area at least annually: Residents, Critical Care nurses, ED nurses, paramedics, Life Flight personnel, Patient Care Coordinators, Pediatric Transport, Cath Lab Staff, PACU nurses, respiratory therapist, OB nurses, and Eye Surgery/Laser Eye Center nurses & residents.
- E. The following staff shall be current with PALS/ENPC as required in their area and/or complete a Pediatric MegaCode review as required in their area at least annually: Pediatric Critical Care nurses, ED, nurses, paramedics, Life Flight personnel, Pediatric Transport, PACU nurses, respiratory therapist, Family Practice residents, and pediatric residents.

X. CONTINUOUS QUALITY IMPROVEMENT

- A. All adult Code Blue records are monitored by the Adult Code Blue Committee and/or the Nurse Manager of Critical Care. Results are reported to the Adult Acute Care Committee twice a year. ED Code Blue records are monitored by the ED managers. Results are reported to the ED Collaborative QA Committee twice a year.
- B. All pediatric Code Blue records are monitored by the Blank Clinical Nurse Specialist and records are reviewed semi-annually by the Pediatric Code Blue Committee.

Hospital Property located within 250 yards from the Hospital (For EMTALA purposes)

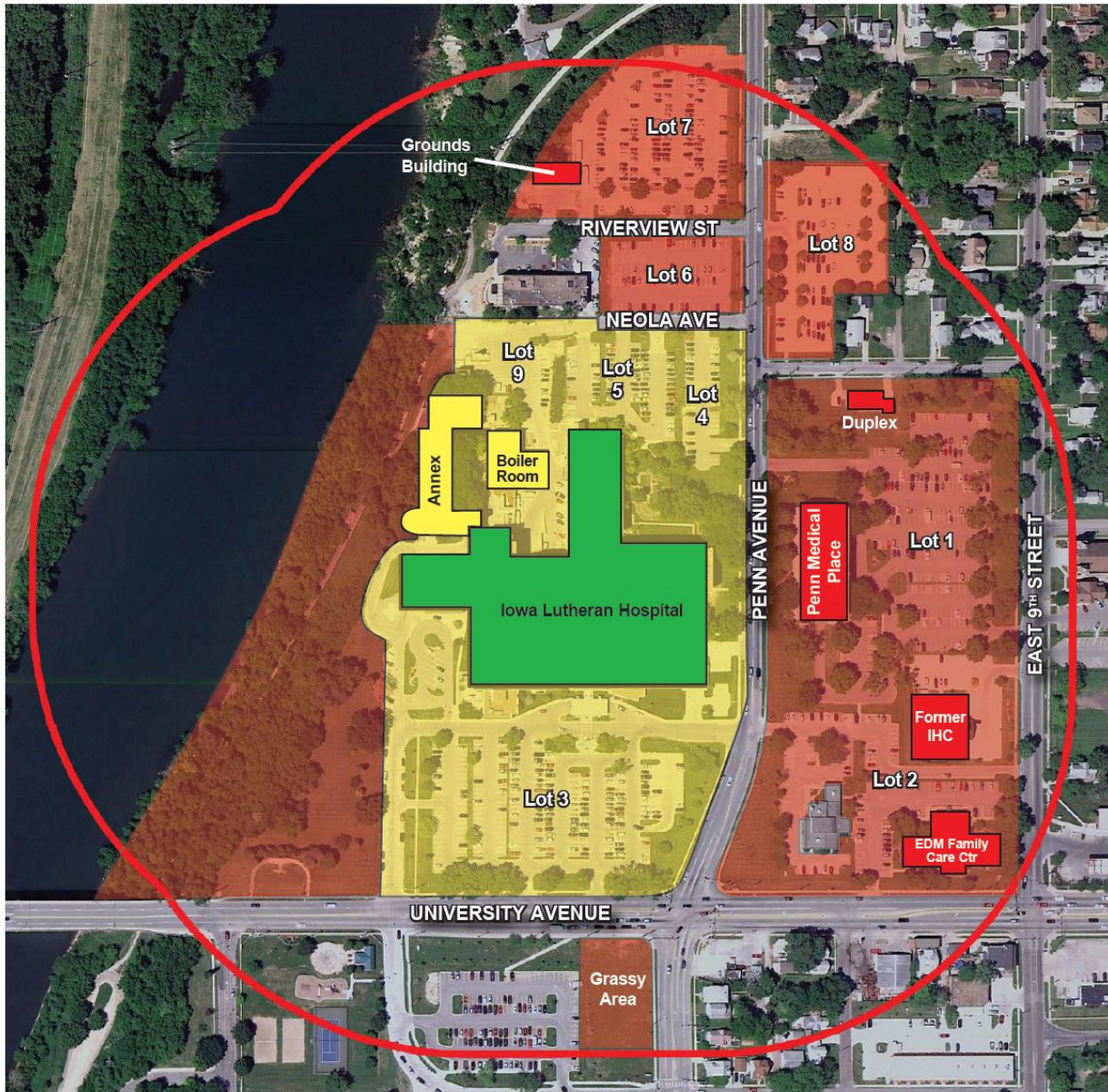


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SCALE IN FEET

Code Blue Zones for Hospital Property



SCALE IN FEET

Green Zone	Yellow Zone	Red Zone	
Iowa Lutheran Hospital	Annex Boiler Room Lots 3, 4, 5, 9	East DSM Family Care Center Former Iowa Heart Center Penn Medical Place Duplex	Lots 1, 2, 6, 7, 8 Grounds Building Grassy Area

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