DUH - Department of Radiology

Location of the department or geographical area(s) of responsibility
The Department of Radiology is responsible for operating the following section/units/ Modalities:

General responsibility (normal operations)
The Department of Radiology is responsible for both inpatient and outpatient radiology services. These services include:

- Diagnostic Imaging
- Interventional (Vascular/Neuro)
- CT
- MRI
- Nuclear Medicine
- PET
- Ultrasound
- Mammography
- Radiopharmacy
- NucCard
- Pediatrics
- Fluoroscopy

The Department also provides Attending, Fellows and Resident Radiologists to provide interpretations and consultative services.

Department of Radiology personnel provide coverage in Duke North, Duke Medicine Pavilion, Cancer Center and Duke South Clinics as well satellite services within the community:

- Ortho – Trauma Spine Center (1b/1c)
- Pediatric Radiology (Children’s Health Center) - Diagnostic (Duke South 2E Red Zone)
- Urology Clinic (Duke South 1G Yellow Zone) - PET
- Radiopharmacy (DS Purple 0023) - Cancer Center Level I
- MRI on Lenox Baker Campus and Page Road - MR
- Pediatric in Lenox Baker (SouthPoint) - CT
- Ultrasound (Duke South and SouthPoint) - X-ray
- CT and MRI at Cary Parkway
**Hours of operation**
Radiology services are available 24 hours/day, 7 days/week, including holidays at the Duke North and DMP locations. Radiology services are available 7a – 6p Monday-Friday in Duke South. Mammography operates a Saturday morning Clinic 8a – 11a. The hours for services in the community clinics vary. If any concerns, please call Marie Stone (Outpatient Chief Technologist) 919-684-7642.

**Radiology Emergency Management Plan: Primary and Secondary Point of Contact**
The CT and X-ray sections within the ED will likely be the first to be made aware of an event. The staff in those areas will contact the Sr. Chief Technologist:

**Sr. Chief Technologist:** Ed Labajetta  
919-886-9029 (cell)  
919-490-1201 (home)  
970-2849 (pager)

AND

**Vice-Chair for Clinical Operations (VCCO): Dr. Jay Baker**  
970-1510 (pager)  
919-419-9998 (home)  
919-943-9841 (cell)

OR

**Vice-Chair for Safety and Quality: Dr. Don Frush**  
919-622-3282 (cell)

Who would then contact the Department Chairman:

**Department Chair:** Dr. Erik Paulson  
Pager # 919-970-1400  
Cell #919-619-9869  
Office# 919-684-241

**Cascading responsibilities**
The VCCO will determine what services (Body, Chest, Peds...) need to be contacted and will contact the on-call attendings.
Sr. Chief Technologist would work with VCCO (or VIR Fellow/Attending) and Nurse Manager to determine the level of support to be called in. Once that determination is made, the Sr. Chief Technologist would cascade calls to the appropriate Operations Managers.

- **X-Ray Chief Technologist**
  Annette Rich
  Cell 919-698-8334
  Pager: 970-2043
  Home 919-309-1230

- **CT Chief Technologist**
  Donna Parker
  Cell: 919-971-6819
  Pager: 970-4153

- **Nurse Manager:**
  Trent Tallent
  Cell: 205-243-2423
  Office: 919-684-7385

- **VP for Diagnostic Services**
  Britt Crewse
  Cell: 919-812-3715
  Pager: 919-970-0929

Director Emergency Preparedness and Planning will need to be contacted: **Jason Zivika:** 919-970-6011 (pager); and the **Duke Operation Administrator:** 970-8001/8002 (pagers). These offices will help in developing a plan, if applicable.

Each Radiology area will have their own call tree for others that need to be notified/called in to assist. The call tree for each section will be placed in a “Red Binder” for this purpose. If staff who are not at work hear of an emergency/disaster that they think may need their assistance they can contact the main Radiology desk at **919-684-2711** for information.
**Staffing**
Staffing level requirements are to be determined by the VCCO or VIR Fellow/attending in collaboration with the Sr. Chief Radiologic Technologist. Staffing levels are determined by the location, nature and size of the emergency/disaster situation. The Sr. Chief Radiology Technologist will contact the Managers of the affected areas. The Technologist Managers or the most Senior Technologist Manager available will initiate the section “phone tree” and contact employees for return to work or to assist in the affected area.

**Emergency/Disaster responsibility:**
The Department of Radiology’s functions are primarily the same during an emergency/disaster as they are during normal operations. In addition to normal functions, the department will:
- Recall technical staff and provide staff to support operations as needed.
- Recall staff to open satellite operations if required
- Prioritize patient’s procedures within the Radiology Department during an emergency/disaster in order to assist with the movement of patients through the treatment process.

**HEICS – (Hospital Emergency Incident Command System)**

Emergency Mobilization Activities – Specific to the Department of Radiology:

**Activation of the plan (Duke North and Duke South Clinics)**
The Department of Radiology will be notified that the Hospital Emergency Incident Command System is being implemented when the ED Radiologist on duty in the Emergency Department telephones the Radiology North Reception desk at 684-2711.

**Activation of the plan (off site satellite)**
The Sr. Chief Radiological Technologist will contact the HCA (Health Care Administrator) or the Team Lead of the satellite to coordinate emergency/disasters and provide Radiology services. The HCA or Team Lead would ask the Radiology Staff on-site to contact the Sr. Chief Radiological Technologist, if they needed assistance at their location.

**Emergency mobilization activities (Duke North and Duke South Clinics)**
Upon hearing an emergency/disaster notification on the overhead paging system or other notification, the Department will take the following steps to mobilize:
All Managers will mobilize personnel and await instructions from the Chairman/Sr. Chief Radiologic Technologist or designee regarding nature and size of the emergency/disaster.

Upon receiving information of the nature or the emergency/disaster and the anticipated needs, the Sr. Chief Radiologic Technologist or designee will:

- Determine what services are likely to be requested.
- Recall staff as needed
- Coordinate activities with DUHS (Duke University Health System) resources.
- Dispatch staff to treatment areas to determine and provide needed services.

**Procedures needed to accomplish department-specific roles during a disaster**
A copy of the Department subplan and a roster of all section employee names and contact information will be maintained on the Radiology intranet. In addition, this list will be placed on the main work bulletin board, in an envelope and/or Red Binder “emergency subplan”, in each section and available to the section Supervisor/Team Leader in the event of an emergency/disaster situation occurs. A copy of the Department subplan will also be on file with the Director - Emergency Preparedness and Planning.

**Staff recalls procedure**
The Department of Radiology maintains a roster of all staff members by department section. The ED Radiologist and Senior Chief Technologist will be in touch with staff, when either is informed there is an emergency/disaster. Recall of Department of Radiology staff in an emergency/disaster is done by the Senior Chief Technologist and contacting other Chief Technologists as needed.

If additional assistance is still needed, the Senior Radiology Administrator will notify the Emergency Operations Center.

**Recovery procedures**
Recovery for the Department of Radiology consists largely of restoration of inventory levels to pre-emergency/disaster conditions, and generation of billing records. This is done by taking a physical inventory of consumables equipment and other items. Equipment is retrieved or replaced. Orders for consumed items are generated and sent to current vendors to meet these needs. Billing records are sent to Patient Accounts for handling.

**Termination of the plan**
The Department of Radiology’s unit subplan may be terminated only by the Senior Radiology Representative once the all clear has been issued by the Incident Commander.
Response to HEICS (Emergency) Code Announcements

BLUE (Medical Emergency)
Code Blue is used for medical emergencies in Duke University Hospital and Duke Clinics.

Staff Response to a Code Blue: Cardiac/Respiratory Arrest (Duke North and Duke South)
1. Initiate CPR
3. Notify Radiology reception desk of location. Station employees to direct the code team to the location of the code.

Staff Response to a Code Blue: Cardiac/Respiratory Arrest (Satellite sites)
1. Initiate CPR
2. Report Code (911) Report to the Dispatcher: state the location, adult or ped.
3. Call for immediate assistance from medical personnel within the building.
   Southpoint: Cardiology for AED and crash cart (nurse’s station 2311, 2312) or send available personnel.
4. Re-assess CPR as medical personnel and/or EMS arrive.

GRAY (Security Threat)
Code Gray is used to alert staff of the presence of a security threat in the area.

Staff response to a Code Gray:
Staff must immediately report, bomb threat, suspicious activity or package of a patient, staff member and/or visitor:
- Call 911 to report the threat/suspicious activity. Be prepared to describe to the communications officer why you think it is suspicious.

Threatening or suspicious person in the area:
- Call 911 to report the incident. Be prepared to describe to the communications officer the behavior being reported, a description of the individual(s) and the location last seen.

Hostage/Threatening/Violent/Agitated/Person with a Weapon:
- Consider your own safety. Do not confront these individuals or put yourself in a dangerous situation.
- Call 911 (or 684-2444 from cellular phones) from a safe location. Be prepared to give as much information as possible to the communications officer regarding the incident. Remain in a safe and secure place until given specific instructions by DUPD. Each
satellite site will designate a person responsible for contacting DUPD so that multiple calls are not made to report the incident.

**Code Gray:**
- DO NOT go anywhere near the area announced in the Code Gray.
- Shut patient doors, ask visitors to remain in rooms until notified.
- Situate a staff member at the entrance/exit of your area to ask visitors/staff to remain on the unit until the situation has been resolved.
- If you are in the area announced in the Code Grey – find a safe place to stay until the all clear is sounded unless instructed to move to another area by Duke University Public Safety Department.

**ORANGE (Hazardous Materials Event)**
Code Orange is used to alert staff of a significant event involving hazardous materials.

A Code Orange will be initiated by the Operations Administrator in conjunction with Occupational and Environmental Safety, the Emergency Department or the Duke Police Officer-in-Charge.
- Follow unit specific procedures.

**Staff response to a Code Orange:**
**Code Orange - Internal**
- Staff should standby and await further instructions
- Follow unit-specific procedures

**Code Orange – External**
- Be alert to individuals entering the hospital who may be contaminated. Some form of lock down or limited access may occur to control access and potential contamination of the facility or others.
- Decon team members should be prepared to respond to the primary/secondary decontamination site.
- Follow unit-specific procedures.

**Staff response to code – Orange at off-sites:**
- Follow clinic specific procedures
- MRI on Lenox Baker Campus would contact 911 and may lock down the facility.

**PINK (Infant/Child Abduction)**
Code Pink is used for missing – infant/child persons within Duke – gender, age and location of missing person.
- Infant = less than 1 year
- Child = greater than 1 year, but less than 18 years old
Discovery of a missing infant/potential abducted infant and/or child or witnessed abduction:

Staff Response to a Code Pink:

- Call 911 to report the incident to the Duke University Police Department.
- Be prepared to provide the dispatcher with a description of the infant/child, and the abductor.
  1. Name of child
  2. Description of the child – age, sex, race, height, weight, clothing
  3. Last know location seen
  4. Direction of travel, if known
  5. Description of suspect abductor, if applicable

- Response to a HUGS alarm, if applicable.
- Do not put yourself or the infant/child in harm’s way by confronting an abductor.
- If not already done, initiate a head count of all patients in your area and search public restrooms, workrooms and patient care areas.
- Report to your pre-assigned monitoring area immediately to observe for anyone carrying an infant/child.
- Ask visitors with infants/children to remain in the area until the all clear has been called. Visitors should be directed to the patient room or waiting room.
- Look for any suspicious behavior, infant size bundles or packages.
- Notify Duke University Police Department immediately of any unusual circumstances or suspicions.

Staff response to Code - Pink at off-sites:
Follow above, except that Durham or local Police Department will respond to 911. (North Duke Street must dial 9 to get an outside line)

PURPLE (Critical Saturation)
Code Purple is used for critical saturation situations.

DUH’s response to a Code:
Purple is based on each unit taking at least one additional patient from the ED or another unit (step-down). Patients will be placed in medically appropriate settings.

Staff Response to a Code Purple:
Radiology would work to prioritize the patient care needs with the ED and other units/areas to help facilitate treatment/discharge of patients.

Staff Response to a Code Purple at an Off-site:
Continue normal operation until notified need of their assistance from Radiology Management or Duke Incident Commander.

**TRIAGE (Mass casualty event/Emergency Plan activation)**

- **Code Triage – Standby:** There is a strong potential that the hospital will be impacted by an event which has occurred, or that is about to occur.

- **Code Triage:** An event has occurred that requires activation of the Duke University Hospital Emergency Plan/HEICS, and/or will generate mass casualties that are beyond the normal capabilities of the hospital.

**Staff response to a Code Triage-Standby:**

- Do not call the Operations Administrator for information. Updates will be provided to you when they become available.
- Be alert to the possibility that an emergency/disaster condition may exist in the hospital or community.
- Ensure that all staff and management are aware of the Code Triage-Standby condition.
- Staff should stay in contact with their immediate Supervisor/Manager for updates.

**Staff response to a Code Triage:**

- Do not call the Operations Administrator for information. Updates will be provided to you when they become available. Calls should be limited to emergent situations.
- Follow the steps detailed in the Emergency Mobilization Activities and Department Specific Procedures portions of your unit’s subplan, “Red Book”.
- Be prepared to initiate your staff call back plan if requested to do so.
- The Emergency Operations Center will report the status of the situation and provide updates when timing permits.

**Staff response to Code Triage at an Off-site:**

Continue normal operation until notified need of their assistance from Radiology Management.

**RED (Code Red)**

Code Red is the HEICS code used for fires in the hospital. Staff should report all fires, no matter how small, to 911.

Each section will have the specific fire code information displayed on the work area bulletin board.

**NOTE:** The term Code Red followed by numeric codes will be used. “This is a Drill” will be replaced with Code Red.

**Staff Response to a “This is a Drill”:**
For fire and emergency evacuation, staff should follow their site-specific fire plan, which includes *RACE and **PASS procedures (found on the OESO safety website: http://www.safety.duke.edu/eoc_plans/firepreventionmanagementplan.pdf).

**Staff response to Code Red (Fire) at an Off-Site:**
- Call 911 and evacuate the building.
- Call Radiology Manager
- Follow site specific plan – Activate *RACE
  - Remove all persons in danger
  - Always dial 911/pull manual alarm
  - Close all doors and /or windows
  - Extinguish fire
- To use the Fire Extinguisher, use **PASS
  - Pull the pin
  - Aim the nozzle at the base of the fire
  - Squeeze the handle
  - Sweep from side to side

**WEATHER (National Weather Service Announcement)**
Duke University Hospital will broadcast weather warnings to notify staff and visitors.

**Staff Response to a Weather alert:**
Hospital Administration will attempt to notify staff of critical weather events. Staff that has access to outside weather information (e.g., radio, TV or internet) may wish to monitor conditions on their own.

Be aware that adverse weather events may affect the hospital in a number of ways including:
- staffing difficulties
- additional patients (possibly mass casualties)
- damage to the hospital
- disruption to utilities

**Hurricane**
- Pre-event: ensure unit subplans address mobilization and staffing.
- Ensure adequate staffing for both pre-landfall and post-landfall.
- Additional guidance will be provided by Hospital Administration.

**Tornado**
- Move patients away from exterior doors and windows to interior corridors.
- Patients that cannot be moved to corridors should be moved to the farthest point in room away from windows and covered with blankets or other available materials.
- Remain in safe refuge areas until the all clear is sounded.
Winter Weather
- Review the Severe Weather plan.
- Ensure that staff knows which category they fall into (essential, reserve, non-essential).
- Ensure adequate staffing.

**Staff response to Weather code at an Off-Site:**
- In the event of unsettling weather condition as listed above, staff must insure patient, visitor and staff safety by relocating to an interior area with no windows.
- Within the clinic there should be a weather radio that is monitored by staff and Radiology staff should know the location.

**Staff response to Weather code at MRI on Lenox Baker Campus:**
- Team Lead will be responsible for coordinating evacuation of mobility facility in the event of severe weather.
- MRI Team Lead would be in touch with Radiology Leadership about the event.
- During daytime hours, Team Lead will contact Lenox Baker Main Desk at 684-6669 to alert them of plans to evacuate. After hours, will page Sharon Zimmerman at 970-4333.
- Coordination must include locating, communication with and evacuating all patients, staff and visitors.
- The Designated Emergency Assembly Point will be in the actual Lenox Baker Facility. Access into the building will be through the side door (with patient ramp) closet to the MRI Mobile Facility.
- Access to Lenox Baker will be granted with use of a designate ID badge which is located inside front cover of this Emergency/Disaster Sub plan “red binder”.
- Light switches for hallway are located on left wall just inside doorway.
- Assembly of staff, patients, visitors and customers should be contained to the immediate hallway inside the building away from entrance door.
- Remain inside refuge area until end of severe weather event.
- Communication and Coordination would go on between MRI Team Lead and Radiology Leadership as to when severe weather event is over.
- Upon departing Lenox Baker Facility, door will lock automatically.

**BLACK (Utility Failure)**
Code Black is used to indicate the failure of a utility system.

**Staff Response to a Code Black:**
**System Failure**
- What to Expect
- Immediate Response
- Computer systems
- Systems down.
- Use downtime procedures and forms.

**Electrical power failure –**
- Emergency Generators Operating

**Many lights out**
- Red plug outlets work. Generator start may take up to 10 seconds.
- Ensure that life support systems are on emergency power (red outlets). Ventilate patients by hand prn.
- Complete procedures in progress ASAP. Use available flashlights.

**Electrical power failure - Total**
- No emergency power. All but battery powered lights out.
- Use flashlights for lights. Ventilate patients by hand. Manually regulate IVs prn. Notify the EOC if additional manpower is needed.

**Medical gases**
- Gas alarms
- Loss of O2, med air, nitrogen, CO2 or nitrous oxide.
- Medical Vacuum (suction)
- No vacuum (suction.)
- Obtain portable suction equipment.
- Natural gas
- Odor (leak) or loss of flame.
- Call 911. Open windows. Do not use any spark producing equipment.

**Nurse Call - No patient contact.**
- Implement temporary bell system.
- Increase patient surveillance.

**Paging**
- Unable to send or receive pages.
- Utilize backup paging system – pagers available in 1307.

**Sewer**
- Drains back up.
- Do not flush toilets. Do not use water.

**Steam**
- Steam sterilizers inoperative.
- Loss of heating
- Conserve sterile materials. Obtain blankets as needed.
**Telephone**
- No phone service.
- Use overhead paging, cell phones or runners.

**Heating, Ventilation, Air Conditioning**
- No ventilation, no heating, no cooling.
- Obtain fans or blankets as needed.
- Restrict use of odorous or hazardous materials. Notify IC if patient is on special respiratory isolation. In OR,
- Move patient to a room with an operating ventilation system.

**Water**
- Sinks and toilets inoperative. No Medical Vacuum (suction). See Medical Vacuum above.
- Use bottled water for drinking. Use waterless hand cleaners.

**Water potability**
- Tap water may be unsafe to drink.
- Do not use tap water, or ice from ice makers. Use bottled water. Place “do not drink” signs at all drinking fountains and wash basins. Toilets will continue to flush.

**Staff response to code black for off-site:**
On-site Radiology Management to be in communication and coordinate response as necessary.