1. **FACILITY PREPARATION**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. **FACILITY STATUS.** (Check all that apply) | | | |
|  | 1. Make a determination as to whether to close or keep the facility open for the event. | * Notify appropriate agencies and leadership. Post notices on main entry doors (staff and patients). * Provide emergency call back number. |  |
|  | 1. If the weather event is over a weekend or after hours provide for a staff emergency recall for the event and notify partners and managers of plans for securing the facility and restoration of operation after the event. | * Notify physicians and patients call staff scheduled to work not at the facility. * Provide estimated return to work time and call back number to check time. * Advise staff of call back contact if different than normal P & P. * Have emergency numbers for contactors and service professionals working with you at your site. * Get vendor s/ reps emergency after hours call back numbers. |  |
|  | 1. Setup event recall before departing the facility. Validate recall numbers. |
|  | 1. TELEPHONE MESSAGE   Program an emergency response message for the main facility message for all callers advising of the status of the facility. NO MESSAGE OPTIONS (cannot leave voice mails). | * Setup emergency message in advance. * Recommend use the phone company Central Office Voice Information system so message is preprogrammed and functional whether or not the facility phone system is working or not. * Do not take messages at this Voice Information number. |  |
| 1. **INSPECT EXTERIOR / GROUNDS**. (Check all that apply) | | | |
|  | 1. Move all loose material such as tables, chairs and construction material from the site or to a secure location. | * Place all material inside in a secured location of attached all items by tying or chaining and locking together and attach to a secure significant structural or other stable element within the perimeter of the facility. * Make certain all exterior pest control bait stations are mounted to a weighted block. |  |
|  | 1. This includes all of the smoking areas ash urns and all trashcans. | * Evaluate smoking areas and ensure all moveable devices are secured or contained and all tables and chairs are secured or contained. |  |
|  | 1. Exterior storage sheds on campus or out buildings. | * Be sure all storage sheds are water tight all windows and vents taped and secure. * Doors are secure and all sensitive material is removed. * Consider staking the structure with hurricane ties if not secured to a concrete pad. |  |
|  | 1. Inspect all overhangs for integrity | * Overhangs drive throughs and other appointments such as covered break areas walkways or awnings are secure not ripped or torn if canvas. * In all overhangs the lighting is securely fastened in place with no loose covers. * All ceiling tiles or panels are in place and are securely ‘Clipped”. * Tape off such entry ways when leaving until after post storm or event inspections establish integrity. This may prevent neighbors from sheltering personal vehicles under your overhangs and avoid liability claims for damages due to this activity. |  |
|  | 1. Exterior lighting and poles / parking lot lights | * Inspect all exterior lighting poles to be certain these are not damaged and all mounting points are not corroded or deteriorated. * Be certain that all Light heads are held securely in place. * Identify all power to exterior lights in electrical panels for emergency responders and staff that may be called back in for emergencies either to turn it on or off for protection from damage. |  |
|  | 1. Utilities access to campus | * All utility access points are identified. * All utilities are locked or secured and have readily available access keys on site. * Utility call back numbers are in the recall and current in the utility plan with account numbers for the facility. * Points of contact to discuss outages with the facility service providers are up to date. |  |
|  | 1. Door Security of all entrance points | * Evaluate door security use of cipher locks and other locks. If locks for security are electrical do you have overrides and positive security latches in place that work if the security system and other locks fail? * Where are keys? * Validate Fire man’s Recall access keys in key box work for main entry locks. Call the local FD for a dry run. |  |

|  |  |  |  |
| --- | --- | --- | --- |
| 1. **CONSTRUCTION ONGOING** (Check all that apply) | | | |
|  | 1. Advise all contractors to secure the construction site and materials and construction entrances or storage areas. | * Site contractors need to move all equipment away from the facility and secure it on site. * All site operations need to be clean and free from laying debris and any free standing unsecured construction materials. * All construction dumpsters need to be covered and the contents weighted down with significant ballast if the dumpster cannot be pulled and removed. * Obstructions to drainage need to be removed to ensure no damming on any rooftops or grounds occurs to prevent free water drainage. * All outside equipment needs to be properly tied down to prevent building damage. |  |
|  | 1. Security provision for contactors staff need to be reviewed and the contractor needs to be on the recall list for revised facility operating hours. | * Add key staff to facility recall listings. * Key numbers for select contractor’s staff or subcontractors need to be added to the facility recall in the event of any issues related to the contractor’s site work or facility work. |  |
| 1. **LAB SAMPLES / BOXES – SERVICES** (Check all that apply) | | | |
|  | 1. Take in all lab specimen boxes from outside to the interior of the facility. | * Lab boxes need not be left outside of the building and certainly not attached to any doors or affixed in other ways. * These will and could become missiles creating damage in high winds. |  |
|  | 1. Send off all current tests leave not test outside for pickup. Validate all tests have been picked up for current patient s. | * Call to be certain all labs specimens and are to be picked up that day prior to leaving. Test results last received at the facility are to be noted as further receipt for test results may be pending dependent upon utility services and office staffing at the ASC and at the vendor locations. * If staff are to be gone from the facility before the usual pickups, make arrangements to deliver specimens to the lab or alternate location, or to another pickup site. * All external boxes should be secured and no specimens left for pickup by day’s end. |  |
| 1. **PATIENTS AND MEDICAL STAFF** (Check all that apply) | | | |
|  | 1. Determine closing times and notify patients and medical staff as necessary. | * Once closing times are determined, all working staff needs to be notified about closing times and possible reopening times. * All PRN and staff not at work but scheduled, need to be called. All patients need to be called and all surgeons need to be called. * This notification needs also to be extended to suppliers such as linen, biomedical waste, supplies, medical gasses and other regular delivery services. |  |
|  | 1. Provide recall lists to key individuals specific for the event. | * Recommend dividing the recall lists and assigning to a primary and alternate for each section. * Assign no more than 10 -15 persons to each list to ensure of efficiency and that recalls are executed completely; many times more than one telephone call is necessary to effect a recall to a single person. * Divide up the medical staff and key physicians / patients for notification between administrative personnel and therefore do not assign these personnel as staff recall lists coordinators. * Have material management or procurement take care of service providers, reps and vendors. * Consider medical records coordinators for dictation services, lab services and validating availability of insurance companies. |  |

|  |  |  |  |
| --- | --- | --- | --- |
| 1. **SUPPLIES / TRASH – LINEN and BIOHAZARD WASTE** (Check all that apply) | | | |
|  | 1. Put up all supplies and remove all trash from the facility into proper containers. 2. Call housekeeping to advise them the facility is closing and advise when housekeeping may come back into service the facility. | * Remove all trash and contain it in bags. * If the dumpster is full, secure the lids and add no trash on top or outside of the dumpsters. * Attempt to get a garbage pickup before storms arrive. If not able to do so do not overfill receptacles. * Internally contain all trash until after the storm. * Housekeeping services will be curtailed on an impending shut down and since this is usually after hours service trash will not be removed or bagged until the next regular cleaning. * Biomedical waste should be picked up of not remove containers from frames if stored outside and contain inside of the building. |  |
|  | 1. Close gates and covers on all receptacles or areas as equipped. | * Close and secure all gates to the trash containment areas and all lids on dumpsters or receptacles. If the gates are left to fly around they will become damaged in the storm. * Add provisions for locking these gates and containers if not so equipped and coordinate in advance with a double lock system for trash haulers or with the local City / County contractors. |  |
| 1. **ROOFTOP EQUIPMENT** (Check all that apply) | | | |
|  | 1. Ensure that the equipment is properly secured and all panels are securely fastened. | * Roof top equipment needs to be inspected for safety security. * If the facility is to be shut down due to strong driving winds / rain have the outside air dampers closed. If very strong directional winds occur these can blow / force rain into these openings and down through the ducting into the facility and cause flooding. * If seals on the A/C or RTU doors and panels are old and worn or lost resilience, consider silver taping all removable panel seams to protect from incoming driving rain. Most critical for the OR units. * On a facility shut down, pull the disconnects to the OFF position for all rooftop mechanical equipment. Exhaust fans are mechanically interlocked so they will be off as well. |  |
|  | 1. Install all screws on A/C equipment and make sure exhaust fan enclosures are securely fastened. (See pre-storm checklists) | * Due to repeated maintenance and service through the years, panel fasteners become loose and walleyed out and do not secure panels firmly in place. * Have the HVAC or maintenance staffs ensure all panels are secured with extra screws if old screw locations are not holding. * If panels blow off of the units, they can cause severe roof damage and if missing may not be able to be replaced. * All exhaust fans should be strapped from the housing to the curbs. * All rooftop mounted equipment should be strapped from the equipment to the curbs. |  |
| 1. **INSPECT ROOF** (Check all that apply) | | | |
|  | 1. Clear off all material on the roof that could be made airborne. | * Remove all unnecessary material from the roof including any leftover roofing materials. * Remove plant debris as this material moves with water to roof scuppers and roof drains to clog drains and scuppers allowing water to build up on the roof. In high rainfalls it is possible for water to weigh more than the roof is capable of supporting. In such situation the roof may be damaged or collapse. |  |
|  | 1. Inspect all mechanical equipment and ensure all covers are in place and screwed tightly. | * Validate all roof improvements have been made. (See above for HVAC). |  |
| 1. **COMPUTER INFORMATION – FILES and RECORDS** (Check all that apply) | | | |
|  | 1. SERVER AND COMPUTER FILES – GENERAL BUSINESS  * Server and patient information / facility business information files. * All PC stations are backed up to server.   ***Note. All patient files and data files should be housed on the server*** | * Start off sight backup process and local back up if possible of all data files and records. * If local back up is removable from the center remove backup from the facility for safekeeping. * IT staff to shut down server and computer equipment properly. |
|  | 1. TELEPHONE SYSTEMS and COMPUTERIZED MEDICAL GAS SYSTEMS, INTERCOMS / NURSE CALL SYSTEMS  * Have Service Company make a software backup of all programming for restoring following and outage.   ***NOTES: Usually all of these systems restore completely from short term or even minor power outages.***  ***If an outage exceeds 8 hours the systems may not restore and if there is no current backup all the programming may need to be redone from scratch.*** | * Check main telephone system for backup and restoring. * Pull off the system all current voice mail messages and make a log of voice mails as there may be lost upon restoration of services. * If there is separate voice mail equipment also backup the voice mail equipment software. * Keep restore disks on item and have provider maintain a copy for use in emergencies. |
|  | 1. FIRE ALARM SYTEM – COMPUTERIZED  * Have the service company print out all device addresses and locations as programmed. * Make a backup copy of the programming software and programming specifics for the facility. | * Print out all device names and addresses and reference points in the systems. * Be sure to include value parameters settings for max and minimum. * Include all alarm points, special instructions, and supervisory and trouble points. * Include alarm monitoring company notification information as well. |
|  | 1. ENERGY MANAGEMENT / BUILDING MANAGEMENT SYSTEMS and HVAC EQUIPMENT  * Have the service provider backup and provide a hard copy of the EMS / BMS programming software with current version being used.   ***NOTE: Having currently installed software is crucial. Upon restoration older versions (such as may be installed at your facility) may not be available of interfaces for programming may not be available requiring a complete equipment upgrade.*** | * Print out all schedules for occupied and unoccupied and special occupancy. * Include all start and stop times, * Include all settings and set points * Include any override options planned. * Also include programming software for VFDs and VAVs if equipped. |
|  | 1. EMERGENCY GENERATOR and TRANSFER SWITCHES  * Emergency generators that are software programmed and controlled. * This also includes emergency transfer switches.   ***NOTE: Some models of transfer switches have battery backups on the control boards that are not connected to the emergency side of the transfer switch. If the outage is for an extended period (more than 8 hours usually) once power is restored the switch will not auto transfer back to NORMAL until the battery charges. These switches can be manually transferred under such conditions by trained staff.*** | * Print out all generator programming parameters settings and set points and backup software. * For the transfer switches backup all software settings and all special settings for generator run times, start times, transfer time and cool down cycles. * Include any run schedules automatically programmed into the transfer switches. |

1. **HIGH WIND PROTECTION**

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. EXTERIOR WINDOWS AND DOORS  * Commercial grade. Inspect all windows and doors for cracking or damage prior to storm. * Check security monitoring devices for sensitivity (replace sensors that are too sensitive). Secure doors and measure effectiveness as necessary. | * Inspect exterior windows and door seals for integrity. * Patch, tape or replace as necessary; budget permitting. |  |
|  | 1. STOREFRONTS and AUTOMATIC DOORS  * Lock and secure doors and operators. * Tape all openings and cracks to avoid wind driven water intrusion. | * Store fronts and electronic doors do not have secure weather seals in these doors. Identify these locations to “tape up” externally when shutting down the facility or storm proofing the facility. * Have emergency supplies on site to tape doors. Painter’s blue 2 inch wide tape is suitable. |  |
|  | 1. INTERIOR PREPARATION  * Move all furnishings from window areas to interior walls | * Even commercial windows can fail in severe storms or tornadoes. * Pull cubical curtains out away from walls and move chairs to center to prevent water damage upon any window failures. * Have a supply of tape and plastic on hand. * Painter's plastic is suitable for this purpose and is inexpensive, easy to store and to use. * For smaller items split large linen or trash bags. |  |
|  | 1. INTERIOR PREPARATION  * Move all medical equipment away form building exterior window walls to interior protected walls. * As an added precaution cover computers and other equipment with plastic to protect from water damage or intrusion. | * Move expensive patient monitoring equipment close to interior walls and cover with plastic. * Do the same for computers printers and other medical equipment. |  |
|  | 1. PATIENT RECORDS  * Secure all patient records and charts in a secure location with in the records department as needed. | * Patient records storage must be secured. * These record storage areas should be covered with plastic to prevent water damage from possible roof failures. |  |
|  | 1. INTERIOR PREPARATION  * Place collection containers beneath all equipment penetrations roof drains and know leak areas. | * Usually facilities have typical potential leak areas that sometimes leak in high water storms. * Place water collection containers under these areas as a preventive cautionary measure before leaving the facility. * If no leaks are ever found place containers by the return air vents to HVAC, exhaust vents and grills to collect water due to any forced water intrusion through equipment openings. These actions may prevent major cleanup issues later on. |  |

1. **ELECTRICAL PROTECTION**

|  |  |  |  |
| --- | --- | --- | --- |
| **CONNECTION MODERATE TO LOW PREVALENCE OF UTILITY DAMAGE Hurricane 2 and below** | | | |
|  | 1. Unplug all non-essential medical equipment and bring to interior walls. Includes anesthesia machines patient monitors, X-ray and all connected equipment. | * Unplug all medical equipment and devices wherever possible. |  |
|  | 1. SEVERE HIGH WINDS  * Cover all computers and electrical equipment / medical equipment with plastic as added protection from overhead water intrusion in the event of a building envelope failure. |  |  |
|  | 1. TELEPHONE EQUIPMENT  * If not protected by a surge suppressor or UPS disconnect and use emergency mailbox to leave message provided by Utility Carrier. | * If the facility is to be shut down leaving a voice mail with the main carrier of your phone service may serve to preempt any confusion if your telephone system goes completely down. * This service must be ordered for your main line and the message can be preprogrammed to be “TURNED ON and OFF” remotely. * Have an UPS on the phone system. * Remember to have your maintenance personnel make a backup of the programming as most systems, if shut down for more than 72 hours, will lose the programming. * Remove and write down all saved voice mails as they could be lost. |  |
|  | 1. COMPUTERS  * Shut down all computers in all areas. * Secure the server routers and microwave equipment. | * Shut down the servers and all computers. * Make two copies of the server backup on to be left on site in the event of server issues on startup and another to be taken off site in the event site areas are damaged. |  |
|  | 1. HVAC EQUIPMENT  * Secure and shut down all refrigeration section of unprotected rooftop equipment. * Unprotected equipment is any equipment without separate phase monitors installed for three phase electrical operated equipment. | * In a total shut down, pull all disconnects to rooftop equipment to the OFF position. * In preparation for storms, have your service provider inspect all equipment for phase monitors and install inexpensive phase monitors to protect equipment in the event of partial power loses. |  |
|  | 1. LIGHTING  * Secure all lighting except life safety lighting circuits. | * Turn off all lighting except for life safety lighting. * For exterior lights and poles if the facility is to be shut down, secure all lighting by shutting down circuit breakers make a list so when the storm passes key recall staff can restore exterior lighting. * Securing this external lighting can prevent other issues including internal electrical fires due to damage to outside fixtures and dangerous live down power assemblies in the event of storm damage. |  |
|  | 1. EQUIPMENT  * Secure all equipment prior to leaving the facility. * Shut down air compressors, vacuum system equipment, sterilizers and boilers. | * Shut down and turn off all equipment that is not to be essential including:   + Shut down the vacuum system and air compressors.   + Shut down sterilizers and boilers; turn off power and water supplies. Shut off all utilities to all equipment. |  |
|  | 1. MEDICAL GAS  * Secure all medical gas system services. * Disconnect anesthesia machines and turn all equipment OFF. | * Shut of medical gases at the manifolds * Disconnect all equipment power cords from the wall. * Startup requires all systems be activated so this measure will ensure that all services are to be reconnected and validated properly when starting up the facility. |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **CONDITION HIGH WIND AND SEVER DAMAGE LIKELY Hurricane 3 and above** | | | |
|  | 1. Comply with all actions above and turn the generator control to OFF. (Emergency Power will not come on when left in this condition) | * If this is a complete shutdown of the facility.   + Make certain the control operator on the generator is turned to the OFF position.   + For most generators this will send and alarm to the main monitoring station panel in the facility indicating the generator is in the OFF position.   + This audible alarm and RED LIGHT will serve as reminder to turn the generator on when staring up the facility. * This is done because in extended outages there may be no way to refuel the generator. Also, if the generator runs out of fuel it cannot be started without having a service technician perform maintenance before starting the unit. * That service may be hard to schedule after any major storm. |  |
|  | 1. Secure all mechanical equipment and roof top ventilation equipment. | See above. |  |
|  | 1. For duration of the storm log off fire alarm and security systems. | * Taking the security and fire alarm systems off line for the major portion of the storm will prevent call backs for nuisance calls during the storm. * Service can be restored remotely with monitoring companies after the storm passes. |  |
|  | 1. Outage planned for 24 hours or less before restoration. Remove all frozen and refrigerated medications and cold pack in coolers within the facility. Place in isolated interior location and clearly label for restocking. | * When preparing a facility for a complete shut down with anticipated power outages for more that 24 hours safe handling of medications and specialized items requiring refrigeration needs to be considered. * In an appropriately sized cooler, bag all refrigerated medications and place in the cooler with ice or cold packs and use a portable suction to remove all air and seal this container. Meds so packed can stay cool for up to 72 hours in good quality coolers. * Repeat for frozen items but these need to be packed with more ice. (Put ice on bottom and be sure to wrap goods in plastic to avoid damage as ice melts). * Frozen tissue sections must be returned to the provider or taken to a hospital or other location for storage unit after the storm passes.   + These sections should not be used unless it can be absolutely verified they did not become unfrozen during the entire storage period. |  |

1. **MISCELLANEOUS ALL CONDITIONS**

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. SECURITY MONITORING SERVICES.   Notify Security Company to only report alarms with perimeter and motion sensor combined signals. | * Prearrange with the security monitoring company to change the way alarms are reported to the monitoring company. High winds can cause false alarms by moving and rattling exterior doors. Equip your security system with dual technology interior motion sensors and have the security monitoring company only report alarm conditions where an external door / break glass sensor and interior motion sensor are both activated; indicating by this dual device response the potential for intrusion is high. Assume all single response alarms are nuisance alarms. * Exterior door sensors alone lead to a high amount of false alarms. Reported alarms may result in fines for repeated police responses. * If you have too many alarms, police will not take your conditions seriously especially in dangerous weather situations where their safety is also a consideration. |  |
|  | 1. GENERATOR FUEL.   Refuel and top off generators. | * All generators should be kept fully refueled during the hurricane season. |  |
|  | 1. FINAL INSPECTION BEFORE LEAVING   Inspect areas for compliance exterior and interior. | * Part of the safety coordinator’s job functions for the facility should include regular facility rounds and routines. |  |
|  | 1. TRASH AND WASTE   Ensure all trash is removed from facility. | * Regular trash pickups including that for abandoned equipment or debris from work projects should be insisted upon during storm periods. |  |

**TIPS**

* ***Remember whenever you call someone to leave a message or obtain a status advisory leave your numbers you desire them to return call you on.***
* ***As a KEY CONTACT make certain you have a telephone at home that will work without being plugged into an electrical circuit.***
* ***CHARGE ALL CELLULAR PHONES AND EXTRA BATTERIES.***
* ***If medications and tissues are cold packed have at least three to four knowledgeable people to respond on call back to replace these items in the refrigerators and freezers. In the event of a severe storm some people may not be able to communicate or get out of their homes for several days.***