

NFPA 99-2012 Risk Assessment Tool



Instructions for Using the ASHE NFPA 99 Risk Assessment Tool

Prior to implementing this risk assessment tool, the following steps should be taken:

1. Establish a multidisciplinary team with knowledge of the facility's space use, patient care services, clinical practices, and other areas as appropriate.
2. Familiarize the team with the risk category definitions found in chapters 4 (Fundamentals) and 12 (Emergency Management) of NFPA 99-2012: *Health Care Facilities Code*. These definitions are included in the category legends on each worksheet; mouse over the "Category Legends" box to see them.
3. Familiarize the team with the ways in which system and equipment operability can affect patient safety.

This risk assessment tool contains three worksheets (Systems, Equipment, and Emergency Management) as indicated on the worksheet tabs below.

Systems Worksheet - This worksheet is used to record the level of risk determined for the listed systems in a given area (room or spaces within a room) of the facility being evaluated. Indicate the risk level with an NFPA 99 risk category number (see the Category Legend for details).

Room Name: Enter the unique identification information for the room being evaluated (i.e., room name or number).

Room Number: Enter the room number, if applicable.

Space: Enter the unique identification information for the space in a room that is being evaluated (e.g., the charting area in a recovery area).

Chapter 5: Enter the risk category for the various components of the **medical gas and vacuum systems** in the room or space being evaluated.

Chapter 6: Enter the risk category for the **electrical system** in the room or space being evaluated.

Chapter 7: Enter the risk category for the various components of the **IT and communications systems** in the room or space being evaluated.

Chapter 8: Enter the risk category for the various components of the **plumbing systems** in the room or space being evaluated.

Chapter 9: Enter the risk category for the various components of the **HVAC systems** in the room or space being evaluated.

Chapter 10: Indicated on this worksheet for information only - to be assessed on the Equipment worksheet.

Chapter 12: Indicated on this worksheet for information only - to be assessed on the Emergency Management worksheet.

Note: Categories assigned in the chapter columns listed above are based on categories as outlined in Chapter 4 of NFPA 99-2012.

Equipment Worksheet - This worksheet is used to record the level of risk determined for all patient care equipment in the facility. Indicate the risk level with an NFPA 99 risk category number (see the Category Legend for details).

Equipment: Enter the name of the piece of equipment being assessed.

Equipment Tag #: Enter the unique identifying number for the piece of equipment being assessed. This information is optional, but should be considered when assessing non-movable equipment.

Category: Enter the risk category assigned to the equipment based on the categories outlined in Chapter 4 of NFPA 99-2012.

Notes: The comment area is provided for additional information about the reasons the risk category was assigned to the piece of equipment.

Note: NFPA 99-2012 (Section 1.3.1.1) defines the equipment covered by the code as "appliances and equipment used in patient care rooms of health care facilities." This includes all equipment that may be used for patient care, such as defibrillators, ultrasound equipment, ventilators, weight scales, thermometers, and so on. Gas equipment includes items such as the oxygen regulator, non-rebreather masks, nebulizers, and nasal cannulas.

Emergency Management Worksheet - This tool is used to record the building category from NFPA 99 Table 12.3 (Application Matrix) assigned to each building.

Building: Enter the name or identifying information for the building.

Category: Enter the risk category assigned to each building based on the categories outlined in Table 12.3 (Application Matrix) in Chapter 12 of NFPA 99-2012.

Notes: This risk assessment tool has been developed to help health care facility staff comply with the risk-based, patient-focused approach required by NFPA 99: Health Care Facilities Code beginning with the 2012 edition. Rather than using the former occupancy-based approach, NFPA 99 now has the same requirements for a procedure no matter where it takes place, focusing on risks to patients and caregivers and on patient outcomes.

This completed risk assessment should be used to determine the steps needed to respond to the identified risks as outlined in NFPA 99. It should be kept as a record of the decisions made and updated annually.

Risk Categories	
Category	Definition
1	Activities, systems, or equipment whose failure is likely to cause major injury or death of patients, staff, or visitors.
2	Activities, systems, or equipment whose failure is likely to cause minor injury of patients, staff, or visitors.
3	Activities, systems, or equipment whose failure is not likely to cause injury of patients, staff, or visitors.
4	Activities, systems, or equipment whose failure would have no impact on patient care or staff.

Reliability Categories	
Category	Definition
1	System must always work (life support) "Always Available"
2	High Reliability Expected "Highly Reliable"
3	Normal Reliability Needed "Normally Reliable"
4	No Impact on Patient Care "No Impact on Patient Care"

Harm Categories	
Category	Definition
1	Major/Death
2	Minor
3	Discomfort
4	No Harm

Clear Waste Water- is solid-free wastewater which includes water produced while waiting for hot water from the faucet to heat up,

Potable Water-Drinking water, also known as potable water, is water that is safe to drink or to use for food preparation.

Essential Electrical System-Essential electrical systems for hospitals must consist of an emergency system and an equipment system. The

Essential electrical system: an electrical system that has the capability of restoring and sustaining a supply of electrical energy to

Electrical and Gas Equipment Assessment Tool



Category Legend

Equipment	Equipment Tag #	Category	Notes
E.R. Dept.			
LIFEPAK20	37539020	MOBILE	ER#2
HILLROM BED		MOBILE	ER#4
GE EKG MACHINE	HERC ID 2052	MOBILE	ER#4
PHYSIO-CONTROL LIFEPAK 12	PHA 0065	MOBILE	ER#1
NIHON KODEN VS/MONITOR	#00110	MOBILE	ER#1
STRYKER STRECTHER		MOBILE	ER#1
STRYKER STRECTHER		MOBILE	ER#2
STRYKER STRECTHER		MOBILE	ER#3
STRYKER STRECTHER		MOBILE	ER#4
NIHON KODEN VS/MONITOR	#08271	MOBILE	ER#2
PLUM A+ IV PUMP	#11051043FB	MOBILE	ER
HUMAN RESOURCES			
MONITOR	ASUS	MOBILE	HR
TOWER	LENOVA	MOBILE	HR
ALPHACARD BADGE PRINTER		MOBILE	HR
INFECTION CONTROL			
MONITOR	ASUS #9ALMQS004115	MOBILE	
PRINTER	HP COLORJET CP1215	MOBILE	
EMACHINE MONITOR	ETQ0500C0049151797F4010	MOBILE	

Equipment	Equipment Tag #	Category	Notes
ADMINISTRATION			
VOIP PHONE SYSTEM	SYBRAN	MOBILE	ADMIN OFFICE
SCANNER	HP SCANJET 700	MOBILE	ADMIN OFFICE
MONITOR	AURIA	MOBILE	
MONITOR	AURIA	MOBILE	
LCD PROJECTOR	EPSON #EX100	MOBILE	
LABORATORY			
CLINTEX STATUS /URINALYSIS ANALYZER		STATIONARY	
BLOODBANK REFRIG. / TEMP CHART		MOBILE	
SENSAPHONE BLOODBANK ALARM		MOBILE	
ISTAT BLOOD GAS ANALYZER		MOBILE	
VITROS ECI/IMMUNOASSAY ANALY.		STATIONARY	
VITROS 350/CHEMISTRY ORG.		STATIONARY	
ABBOTT RUBY HEMO ANALY		STATIONARY	
MONITOR	ASUS #99LMQS006549	MOBILE	
MONITOR	AURIA #EQ1960	MOBILE	
MONITOR	VIEWSONIC #QQ2092461463	MOBILE	
TOWER	E MACHINE #PTNCV0200114706A36300	MOBILE	
TOWER	E MACHINE #PTNCV020011520CB07300	MOBILE	
TOWER	LENOVO #MJNP986	MOBILE	
BUSINESS OFFICE			
MONITOR	ASUS	MOBILE	
	DELL	MOBILE	
TOWER	THINKCENTRE	MOBILE	
TOWER	MAC CHINES	MOBILE	
MEDICAL RECORDS			
		MOBILE	
MONITOR	ACER	MOBILE	
MONITOR	PLANAR	MOBILE	
MONITOR	AURIA	MOBILE	
TOWER	EMACHINE #1	MOBILE	
TOWER	EMACHINE #2	MOBILE	
SCANNER	HP SCANJET 7000	MOBILE	
SCANNER	HP SCANJET 7000	MOBILE	

Equipment	Equipment Tag #	Category	Notes
CENTRAL SUPPLY		MOBILE	
MONITOR	ACER	MOBILE	
MONITOR	ACER	MOBILE	
SEQ. DVT. PUMP HEMO FORCE	#{21) C870009892	MOBILE	
DIETARY			
STOVE/OVEN	#36CY1C0650066368	STATIONARY	
ICE MACHINE	#B400110646364	STATIONARY	
TOWER	DELL #7901WN1EV14150421677	MOBILE	
MONITOR	AURIA#AEQ196LEQ196L25022012045	MOBILE	
PRINTER	HP LASERJET #SHWGC110000VND3600735	STATIONARY	
FREEZER/FRIG			STATIONARY
E.R			
IV PUMP	PLUM A #	MOBILE	
NIHON KODEN VS	#08271	MOBILE	E.R.#2
STRYKER STRETCHER		MOBILE	
STRYKER STRETCHER		MOBILE	
STRYKER STRETCHER		MOBILE	
NIHON KODEN VS/ MONITOR	#00110	MOBILE	ER#1
PHYSIO-CONTROL LIFEPAK 12	#PHA-0065	MOBILE	ER#1
GE EKG	#HERC ID 2052	MOBILE	
HILLROM BED		MOBILE	ER#1
LIFEPAK 20	#37539020	MOBILE	ER#2
NURSING 2ND FLOOR			
TELEMETRY PRINTER	HP#CNBxB22588	MOBILE	
TELEMETRY COMPUTER	NIHOKODEN #V5260610-0A	MOBILE	
TELEMETRY MONITOR	EIO#C16000150	MOBILE	
TELEMETRY EQUIP	NIHONKODEN BOX #1P10.0.194.135	MOBILE	

Equipment	Equipment Tag #	Category	Notes
HOLTER MONITOR	#EQ196L25022012221	MOBILE	
NIHONKODEN EKG	#003036	MOBILE	
PATIENT LIFT	LINAK SIT TO STAND #IT#LA31-C139-00	MOBILE	
PATIENT LIFT	MEDI MAN HOYER #78006	MOBILE	
PATIENT BED	HILLROM	MOBILE	#PHA-0114
PATIENT BED	HILLROM	MOBILE	#PHA-0103
PATIENT BED	HILLROM	MOBILE	#PHA-0116
PATIENT BED	HILLROM	MOBILE	#PHA-0104
PATIENT BED	HILLROM	MOBILE	#PHA-0109
PATIENT BED	HILLROM	MOBILE	#PHA-0107
PATIENT BED	HILLROM	MOBILE	#PHA-0110
PATIENT BED	HILLROM	MOBILE	#PHA-0113
PATIENT BED	HILLROM	MOBILE	#PHA-0102
PATIENT BED	HILLROM	MOBILE	#PHA*0105
IV PUMP	PLUM A	MOBILE	#13973367
IV PUMP	PLUM A	MOBILE	#13986235
IV PUMP	PLUM A	MOBILE	#13973352
ALARM		MOBILE	
I-STAT/BLOOD GAS ANALYZER		STATIONARY	
ABBOT RUBY/HEMA ANALYZER		STATIONARY	IN STORAGE
MONITOR	TINKCENTRE	MOBILE	IN STORAGE
MONITOR	ASUS	MOBILE	IN STORAGE
MONITOR	ASUS	MOBILE	IN STORAGE
TOWER	E-MACHINE	MOBILE	IN STORAGE
TOWER	E-MACHINE	MOBILE	IN STORAGE
CENTRIFUGE/LW SCIENTIFIC ULTRA 8V		STATIONARY	
WEST LAB II MICROSCOPE		MOBILE	
LECIA MICROCOPE		MOBILE	
FRIGADAIRE REFRIGERATOR		STATIONARY	NUTRITION ROOM
FRIGADAIRE REFRIGERATOR		STATIONARY	
STANLEY COPIER		MOBILE	NURSES STATION
BROTHER PRINTER		MOBILE	NURSES STATION
HOSHIZAKI ICE /WATER MACHINE	#DCM-270BAH-OS	STATIONARY	NURSES LOCKER ROOM
PHYSICAL THERAPY-INPATIENT			

Equipment	Equipment Tag #	Category	Notes
COMPUTER	LENOVO-THINKCENTRE M-780004US	MOBILE	
PRINTER	STANDLEY 20165	MOBILE	
COMPUTER MONITOR	ACER #03000998243	MOBILE	
RESPIRATORY THERAPY			
MONITOR	PLANAR PLL2210W	MOBILE	
CPU	LENOVO THINKCENTRE	MOBILE	
PRINTER	HP2035	MOBILE	
SMITH SPIROLAB PULMINARY FENTOUS	PHA#0124	MOBILE	ER#4
PHYSICAL THERAPY-OUTPATIENT			
COMPUTER		MOBILE	
TREADMILL	GOLDS GYM 450	STATIONARY	
RECUMBANT BIKE	SCHWINN ACTIVE 20	STATIONARY	
ELECTRICAL STIMULATION /US	LEGEND XT/#2760	MOBILE	
ELECTRICAL STIMULATION /US	DINOTRON #850+D850	MOBILE	
PARALLEL BARS		STATIONARY	
CHATTANOOGA HYDROCOLLATOR		STATIONARY	
INTELLECT LEGEND XT ULTRASOUND	PHA#0160	MOBILE	
WEIGHT TOWER W/ DUMBBELLS		STATIONARY	
ULTRA SOUND/IFC	PHA#0161	MOBILE	
MAT TABLES	SMALL	MOBILE	
MAT TABLES	SMALL	MOBILE	
MAT TABLES	LARGE	MOBILE	
SMALL TRAMPOLINE		MOBILE	
XRAY DEPARTMENT			
1XC SHIMADZU RADSPEED MANUAL-L TABLE		STATIONARY	RADIOGRAPHIC SYSTEM ELEVATING TABLE

Equipment	Equipment Tag #	Category	Notes
SHIMADZU ELEVATING TABLE	RADSPEED BK200MK	STATIONARY	
CEILING TUBE SUSPENSION	#CH-200M #011X615004	STATIONARY	
RADIOGRAPHIC MAUAL PKG.		STATIONARY	
WALL BUCKY STAND	BR-12550M	STATIONARY	
GE BONE DENSITY	11100068R023	STATIONARY	
XRAY MACHINE GE	1061eD1	PORTABLE	
AGFA CR 12 & NX READER	30010	STATIONARY	
CRMD-CASSETTE	5R3OU	PORTABLE	
CRMD-CASSETTE	5R3OU	PORTABLE	
CRMD-CASSETTE	5R3OU	PORTABLE	
CRMD-CASSETTE	5R3OU	PORTABLE	
SURGERY DEPARTMENT			
STRYKER SURGERY STRETCHER		MOBILE	
STRYKER REMAISSAINCE SERIES STRETCHER		MOBILE	
INVIVO VS MACHINE	#PHA 0173	MOBILE	
NIHON KODEN VS/MONITOR	#00111	MOBILE	
RADIANCE NDS MONITOR	#11-184437	MOBILE	
FUJINON LIGHTSOURCE	#4S081A177	MOBILE	
FUJINON PROCESSOR	#4V395A177	MOBILE	
ENDO GATOR	#A060315	MOBILE	
DATEX-OHMEDA CARDIO CAPS	#FBWE00068	MOBILE	
VALLEY LAB FORCE 4B GENERATOR	#P2F3411B	MOBILE	
ELECTROSURGICAL UNIT		MOBILE	PCH # 341
RADIANCE NDS MONITOR	#07-108511	MOBILE	
FUJINON LIGHTSOURCE	#45081A337	MOBILE	
FUJINON PROCESSOR	#4V395A337	MOBILE	
BYRNE MEDICAL ENDOGATOR	#A060641	MOBILE	
FUJINON SCOPE	#2C470A019	MOBILE	
FUJINON SCOPE	#JC296A013	MOBILE	
FUJINON SCOPE	#3G201A231	MOBILE	
FUJINON SCOPE	#3G201A285	MOBILE	