ZUCKERBERG
SAN FRANCISCO GENERAL
Hospital and Trauma Center

Environment of Care

Annual Report

Fiscal Year 2023-2024

Approvals:

Environment of Care Committee: October 2024

Nursing Executive Committee: November 2024

PIPS Committee: November 2024

Medical Executive Committee: December 2024

Presentation & Review Schedule:

Joint Conference Committee: December 2024

San Francisco Health Commission: December 2024

INTRODUCTION

The goal of the Zuckerberg San Francisco General Hospital & Trauma Center (ZSFG) Environment of Care (EOC) Program is to provide a safe, functional, and effective environment for the care of patients, as well as for staff and visitor use. The EOC Program encompasses the following seven programs/areas:

I. Emergency Management (Lann Wilder – Director of Emergency Management)
II. Fire & Life Safety Management (AJ Singh – Director of Facilities Services)
III. Hazardous Materials and Waste Management (Joey Williamson – Director of Environmental Health and Safety)
IV. Medical Equipment Management (Elkin Lara-Mejia – Manager of Biomedical Engineering)
V. Safety Management- (Joey Williamson – Director of Environmental Health and Safety)
VI. Security Management (Basil Price – SF DPH Director of Security)
VII. Utility Systems Management (AJ Singh – Director of Facilities Services)
VIII. EOC Committee Leaders- (Additional Members)

The EOC Program is managed by the EOC Committee. The EOC Committee is a multi-disciplinary group which is focused on the continuous improvement of all aspects of the Environment of Care.

Activities of the EOC Committee include:

- Identifying risks and implementing systems that support safe environments,
- Working to ensure that hospital staff are trained to identify, report, and take action on environmental risks and hazards,
- Setting and prioritizing the hospital's EOC goals and performance standards and assessing whether they are being met, and
- Working to ensure the hospital is compliant with the EOC-related requirements of all applicable regulatory bodies.

Membership of the EOC Committee is comprised of:

- Program managers for each of the seven EOC Management Programs, as listed above
- Representatives from:
    - Clinical Laboratories (Andy Yeh),
    - Dept. of Education & Training (Justin Dauterman),
    - Environmental Services (Francisco Saenz),

- Infection Prevention & Control (Elaine Dekker),
- Nursing (Andrea Chon),
- Quality Department (Emma Moore for Regulatory),
- Pharmaceutical Services (Vacant),
- Linen and Messenger Department (Olivia Johnson), and
- Food Nutrition Services (Vacant)

EOC projects and initiatives include opportunities for improvement identified during ongoing hazard surveillance, risk assessment, and other EOC activities to promote a culture of safety awareness.

As of January 2024, Chauncey Jackson and AJ Singh serve as co-chairs of the EOC Committee.

The EOC Annual Report highlights the activities of the EOC Program during Fiscal Year 2023-2024. For each of the seven EOC chapters, it is organized as follows:

- Scope,
- Accomplishments,
- Program Objects,
- Performance Metrics, and
- Goals and Opportunities for Improvement

This year's additional chapter ("Unsung Heroes of the Environment of Care Committee") details contributions, accomplishments, and challenges from Departments (Education & Training, Environmental Services, Infection Prevention & Control, and Pharmaceutical Services) who devote time and resources to ZSFG EOC activities, but do not have traditional Joint Commission mandated chapters in the report.

I. EMERGENCY MANAGEMENT

SCOPE

The Emergency Management Program provides information, planning, consultation, training, resources, and exercises for hospital staff and leadership to ensure that Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) effectively mitigates the impact of, prepares for, responds to, and recovers from emergencies and disasters and therefore can sustain its Mission of providing quality healthcare and trauma services with compassion and respect. These efforts support ZSFG's core value of patient and staff safety as well as the accountability goal of complying with

regulatory standards. The Director of Emergency Management develops and implements policies, procedures, protocols, standard work and other job aids in accordance with:

- California Administrative Code Disaster and Mass Casualty Program (Title 22);
- The National Incident Management System (NIMS) and the California Standardized Emergency Management System (SEMS);
- The Joint Commission Standards and Elements of Performance; and
- The Centers for Medicare and Medicaid Services (CMS) Conditions of Participation

The Emergency Management Program encompasses all departments and areas of the ZSFG campus, including those at the Behavioral Health Center

ACCOMPLISHMENTS

- Provided Hospital Incident Command System (HICS) Basics training for ZSFG managers and supervisors.
- Currently updating our Extreme Heat Hazard Specific Plan to integrate new National Weather Service and Centers for Disease Control recommendations for managing patients during extreme heat events – anything over 85F in San Francisco.
- Distributed the updated Emergency Operations Plan to all departments.
- Worked with Nursing Administration, Clinical Informatics and Convergent Technologies to test business continuity policies and procedures for planned downtime for Epic and network maintenance.
- Clinical and HICS Incident Management Teams effectively and successfully managed departmental earthquake preparedness drills for the 2023 Great California ShakeOut, two scheduled computer system downtime server patch events, two extreme weather events, two Citywide Communications drills, three tabletop surge exercises, one brief commercial power alert, a large multi-functional mass casualty incident exercise, an external water main rupture with resultant flooding, as well as alert activations for the APEC Conference, New Year's Eve, the Super Bowl, and the Pride Parade and related events.

PROGRAM OBJECTIVES FOR FY 2023-2024

Objectives	Met/ Not Met	Comments and Action Plans
ZSFG conducts an annual hazard vulnerability analysis (HVA) to identify potential emergencies that could affect demand for the hospital's services or its ability to provide those services, the likelihood of those events occurring, and the potential impact and consequences of those events. The HVA is updated when significant changes occur in the hospital's services, infrastructure, or environment.	**Met**	Updated in February, 2024 and shared with SFSD, SFFD, SFPD, DPH, the SF Department of Emergency Management and other SF hospitals in August, 2024.
ZSFG develops and maintains a written all-hazards Emergency Operations Plan that describes the response procedures to follow when emergencies occur. The plan and associated tools facilitate management of the following critical functions to ensure effective response regardless of the cause or nature of an emergency: • Communications • Resources and Assets • Safety and Security • Staff Responsibilities and Support • Utilities and Critical Systems • Patient Clinical and Support Activities	**Met**	Distributed the updated ZSFG Emergency Operations Plan and Hazard Specific Plans to all departments.
ZSFG implements its Emergency Operations Plan when an actual emergency occurs.	**Met**	No significant actual emergencies occurred during this year.
ZSFG's emergency response plan and incident command system facilitate an effective and scalable response to a wide variety of emergencies and are integrated into and consistent with the Department of Public Health Disaster Plan and the City and County of San Francisco Emergency Operations Plan, and are compliant with the California State Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).	**Met**	Demonstrated plan scalability and effectiveness during multiple functional and tabletop exercises and activations for preplanned events.

ZSFG trains staff for their assigned emergency response roles.	**Met**	• New Employee Orientation • Annual Emergency & Disaster Response Training • HICS Basics Training
ZSFG conducts exercises and reviews its response to actual emergencies to assess the appropriateness, adequacy and effectiveness of the Emergency Operations Plan, as well as staff knowledge and team performance.	**Met**	Completed After Action Reports on activations. Assessed front line staff knowledge during EOC Rounds.
Annual evaluations are conducted on the scope, and objectives of this plan, the effectiveness of the program, and key performance indicators.	**Met**	Annual Evaluation by Disaster and EOC Committees completed September, 2024.

The Disaster Committee and the Environment of Care Committee have evaluated these objectives and determined that they have been met. The program continues to direct emergency management preparedness and response in a positive and proactive manner.

PERFORMANCE METRICS

An analysis of the program objectives and key performance indicators is used to identify opportunities to improve performance and evaluate the effectiveness of the program. This analysis provides the Disaster and Environment of Care Committees with information that can be used to update the Emergency Management program activities. The following are current performance metrics:

Performance Metrics	2023-2024 Goal	2023-2024 Results	Comments & Action Plan
Specific Staff Will Complete Required Training in HICS. Current designated Staff who have completed HICS Basics – Baseline 88% in 2019.	**90%**	**96%**	**Met.** 284 Managers and Supervisors have completed HICS Basics Training.
Ensure that Staff, Patient and Visitor Communication is Distributed During Drills and Actual Incidents.	**95%**	**100%**	**Met.** Signage and ongoing messaging during MCI Exercise and ATS repairs impacting elevators.
During Disaster Exercises and Actual Incidents, the Incident Management Team will Complete	**95%**	**97%**	**Met.** Patient movement did not occur according to plan

Critical Functions.			during MCI Exercise.
Decrease Everbridge Undeliverables.	**< 0.10%**	**0.09%**	**Met.** Regularly updated contact information.
Assess Frontline Staff Knowledge of Emergency Procedures.	**95%**	**99%**	**Met.** Excellent response overall.
During Disaster Exercises and Actual Incidents, HICS Staff will Complete Appropriate Documentation on HICS Job Action Sheets & Tools.	**95%**	**98%**	**Met.** Minor omissions during MCI Exercise.
Implement at Least 90% of Corrective Actions Identified in FY 2013-2023 Exercises and Actual Incidents by 6/30/24.	**90%**	**96%**	**Met.** Most issues have been completed or are implemented and ongoing.

EFFECTIVENESS

The Emergency Management program has been evaluated and is considered to be effective by both the Disaster Committee and the Environment of Care Committee. The program continues to direct and promote emergency and disaster preparedness and response capabilities in a proactive manner.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2024-2025

- Update Hazard Specific Plans to ensure alignment with new National Weather Service and CDC guidelines and recommendations.
- Continue to develop and implement progressive Drills and Exercises for Security Emergencies Response, including Lockdown, Shelter in Place, and Active Assailant response.
- Continue providing training on the Hospital Incident Command System (HICS) for Incident Management Team members, supervisors and managers.
- Update the Emergency Management IntraNet site to provide easily accessible information for all ZSFG staff.
- Continue to ensure effective and efficient incident management and documentation.

The proposed performance metrics for these goals include:

Emergency Management Proposed Performance Metrics for 2024-2025	Target	Comments & Action Plan
Implement more extensive monitoring of heat impacts on patient care areas and vulnerable patient populations with 100% update of plan to align with new NWS,	**95%**	**Driver Metric.**

CDC and DPH guidelines by June 2025.		
Implement training and test staff response performance through a progressive set of quarterly objectives, drills and exercises including lockdown, shelter-in-place and Active Assailant response with 90% successful completion by June 2025.	**90%**	**Driver Metric.** Quarterly Activities and Specific Exercise Objectives
Specific Staff Will Complete Required Training in HICS Basics.	**95%**	**Watch Metric.**
During Disaster Exercises and Actual Incidents, the Incident Management Team will Complete Critical Functions.	**95%**	**Watch Metric.** Continuing focus on standard work and documentation.
Provide frontline staff with culturally and linguistically appropriate resources and talking points to communicate with patients, family and visitors for 95% of HICS Activations lasting longer than 4 hours during 2024-2025.	**95%**	**Watch Metric.** Continuing focus on patient communication and experience.
Follow Up on Issues Identified for Improvement During HICS Activations during prior years.	**95%**	**Watch Metric.** Ensuring accountability for Corrective Actions.
Assess Frontline Staff Knowledge of Critical Response Actions for our Most Likely and Highest Impact Emergencies.	**95%**	**Watch Metric.**
Maintain Everbridge Alert System Undeliverable Messages to ≤ 0.10%.	**≤ 0.10%**	**Watch Metric.** Ensuring safety for staff with critical messaging.

II. LIFE SAFETY MANAGEMENT

The Life Safety Management Plan demonstrates comprehensive understanding, application, and adherence to the latest life safety codes of the National Fire Protection Association (NFPA), Federal, State & local authorities, and as required by various other regulatory bodies. The Life Safety Management plan is designed to ensure an effective response to emergencies that could endanger the safety of patients, staff & visitors, and affect the Zuckerberg San Francisco General environment of care (ZSFG).

SCOPE

The Life Safety Management Program applies to all 16 buildings on the ZSFG campus (approximately 1.8m sqft of floor space), including all bond funded construction projects.

Notification and response to any event includes the ZSFG Fire Marshal, Facility Services staff, and Hospital Leadership.

ACCOMPLISHMENTS

- Completed annual test, inspection, and repairs to fire and smoke dampers on the Ground & 1st floors in Bldg 5 per NFPA standards: required every four years. The intent is to test and inspect two floors per year to maintain compliance at a minimal care impact and predictable financial cost. The ZSFG HVAC crew has made repairs per the inspection report and provided damper access to previously inaccessible dampers. As of this report, all FDs & FSDs are accessible.
- Completed annual test, inspection, and repairs to fire and smoke dampers on the 6th & 7th floors in Bldg 25 per NFPA standards: required every six years. The intent is to test and inspect one to two floors per year to maintain compliance at a minimal care impact and predictable financial cost. The ZSFG HVAC crew has made repairs per the inspection report.
- Annual HVAC smoke control testing and repairs were completed in February. Smoke control testing, in addition to being an LS requirement, maintains a safe and reliable smoke control system.
- Assessed risks at and around various construction projects and assisted the project team in implementing Interim Life Safety Measures (ILSM) as necessary. Continuous project monitoring enhances the care experience in addition to providing a quality, and safe patient care environment.
- Perform the fire drills in buildings one per shift per quarter to meet the NFPA requirement. Provided the fire life safety training to the staff. Inform the patient population that ZSFG is a non-smoking campus and familiarize responding crews with SFFD to our hospital.
- Completed the 5 years sprinkler system inspection and test on building CHN, 5, 80 and 90 to meet the California code and regulation – Title 19 and NFPA 25.

PROGRAM OBJECTIVES

Objectives	Met/ Not Met	Notes/Action Plan(s)
The Fire Plan defines the hospital's method of protecting patients, visitors, and staff from the hazards of fire, smoke, and other products of combustion and is reviewed and evaluated at least annually.	**Met**	At a minimum, annually review the SFGH Fire Plan. Problems are assessed and addressed for impact to the hospital's core values of safety, and responsibility.
The fire detection and response systems are tested as scheduled, and the results forwarded to the EOC Committee quarterly.	**Met**	The Campus Fire Alarm system serving SFGH is routinely maintained, tested, and repaired as necessary.
Summaries of identified problems with fire detection, NFPA code compliance, fire response plans, drills, and operations in aggregate, are reported to the EOC Committee quarterly.	**Met**	Any problems or deficiencies of the fire alarm system are repaired in a timely fashion or is reported in the quarterly Environment of care (EOC) report.
Fire Prevention and Response training includes the response to fire alarms at the scene of the fire alarm, critical locations of the facility, the use of the fire alarm system, processes for relocation and evacuation of patients if necessary, and the functions of the building in protection of staff and patients.	**Met**	All fire drills required for the facility have been conducted per schedule. Staff training in response, and system device functionality are covered as part of the drill.
Fire extinguishers are inspected monthly, and maintained annually, are placed in visible, intuitive locations, and are selected based on the hazards of the area in which they are installed.	**Met**	All 898 fire extinguishers on Campus are inspected and maintained as required. All extinguisher types are appropriate to their use and location.
Annual evaluations are conducted of the scope, and objectives of this plan, the effectiveness of the programs defined, and the performance monitors.	**Met**	Items monitored in the annual report and fire drills are assessed for effectiveness and improvement.

PERFORMANCE METRICS

Life Safety Management Performance Metrics	2023 1st Qtr.	2023 2nd Qtr.	2024 3rd Qtr.	2024 4th Qtr.	Target	Comments and Action Plan
Quarterly Fire Drills: a minimum of 9 per quarter - one fire drill per shift, w/ completed department evaluation forms.	12	10	9	10	Minimum of 9 drills per quarter. 2 per shift	Target achieved, extra drills due to interim life safety measures, or for training purposes. Discussed issues uncovered during drills and took corrective actions.
False fire alarms	23	36	22	30	75 or less false alarms per year	Target not met – False fire alarm goal at less than 50 for the year. 64 of 111 FAs were smoking/ e-cig related.
Post Drill knowledge test score	99%	99%	99%	99%	95%	Test scores exceed target expectations for emergency response procedures. Reflect that staff understand proper emergency response procedures.

Aim: For FY 2023-2024, false fire alarm goal on campus was adjusted to 75 per year or fewer.

Target of 75 or fewer false fire alarms for FY 2023-2024 has not been met.

The rise in false fire alarms is directly related to the use of vapes, e-cigarettes, and cigarettes in Bldg 25 patient care bathrooms. 57% of false alarms were caused by smoking/vaping in the hospital.

EFFECTIVENESS

The Life Safety Management Program is effective; however, the number of false fire alarms needs constant management.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2024-2025

- Manage false fire alarms for a quality and safe care experience in Bldg 25.

- Continue engagement with projects on the ZSFG Campus. Ensure that the appropriate Risk Assessments for a quality, and safe care experience are followed.
- Continue implementing fire alarm upgrade funded by the 2016 bond.
- Engage staff and contractors to implement projects funded by the 2016 bond measure.
- Create a project to replace all sprinkler heads in Building 5 (per NFPA 25, 5.3)

Proposed Performance Metrics for 2024-25	Target	Comments and Action Plan
AIM: manage and reduce false fire alarms in Bldg 25 to a more acceptable level through staff training.	**75 or fewer false fire alarms per year.**	Continue staff training and engagement on the fire alarm system in Bldg 25.
AIM: Engage staff and contractors to review & implement the 2016 bond measure projects pertaining to the fire alarm system.	**Provide ZSFG staff oversight for all projects.**	Involve stake holders in project implementation.

III. HAZARDOUS MATERIALS & WASTE MANAGEMENT

The Hazardous Materials and Waste Management Program is designed to minimize the risk of injury and exposure to hazardous materials through proper selection, use, handling, storage and disposal. The program also works to control the risk of exposures to hazardous components such as asbestos and lead in existing building materials which may be disturbed during construction and renovation activities. The program assures compliance with all applicable local, State, and federal codes and regulations.

SCOPE

The Hazardous Materials and Waste Management Program applies to the entire campus of Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) apart from UCSF research activities. The Hazardous Materials and Waste Program also works to ensure that construction activities do not result in patient, staff, or visitor exposures to potentially hazardous materials or processes.

ACCOMPLISHMENTS

- Continued to work with Capital Projects, ZSFG Facilities, and Infection Control to allow construction within operating hospital buildings as well as in very close proximity to

staff, patients, and visitors without significant incidents or exposure concerns.

- Maintained ZSFG Environmental Permits and acted as liaison between regulatory agencies including the SF PUC, DPH Hazardous Materials Unified Program Agency, and Cal/OSHA and ZSFG. Continued to work with ZSFG management and staff regarding Cal/OSHA regulations, policies, and practices and assisted in responding to inquiries from Cal/OSHA regarding concerns about working conditions.
- Reviewed and updated Hazardous Materials & Waste Management policy 5.01.
- As suggested by the Joint Commission, the campus hazardous materials inventory for buildings 5 and 25 has been updated. The inventory is available online. SDS binders were also provided to units that store 1-gallon or more hazardous materials.
- Updated the ZSFG website for EH&S and added the following pages: Ergonomics, Hazardous Materials clean up page, and Hazardous Materials inventory.
- Completed a chemo clean-up video for training, available to view on the ZSFG website.

PROGRAM OBJECTIVES/PERFORMANCE METRICS FOR 2023-2024

The following metrics provide the Environment of Care Committee with information needed to evaluate performance of the Hazardous Materials and Waste Management Program activities and to identify further opportunities for improvement:

Objectives	Met / Not Met	Comments and Action Plans
Chemical Inventories Coordinates the update of chemical inventories by departments, maintains a master set of SDSs, and assists departments when they are having difficulties obtaining or interpreting SDSs.	**Met**	The department managers maintain current inventories of chemical products used by the Department. Inventories shall be submitted to EH&S if there are any changes. SDS hard copies shall be stored in the Department's SDS binder in a conspicuous area on the unit. Electronic versions of SDSs may be used if Department staff have reasonable and unhindered access to a computer with internet access.
Chemical Waste Oversees chemical waste management, maintains records of hazardous waste disposals, and ensures proper disposal procedures are followed for hazardous, medical, and radioactive wastes.	**Met**	EH&S manages the hazardous waste manifests and is kept in the EH&S office for 3 years. ZSFG is currently using Clean Harbors for any hazardous waste disposal.

Exposure Monitoring Evaluates exposures to radiation and high risk chemicals and conducts exposure monitoring of other chemicals when a significant potential for exposure is identified to be present.	**Partially Met**	EH&S is in the process of purchasing OmniTrak equipment to measure temperature, humidity, particulate matter, volatile organic compounds, and formaldehyde.
Training and Information Develops and distributes Employee Health and Safety Bulletins, Safety Grams and Safety Alerts, as issues are identified.	**Met**	EH&S published monthly EH&S newsletter/safety grams. They are available on the ZSFG network.
Hazardous Materials Response Supports and assists SFGH Facilities in responding to hazardous materials spills. Assists managers in updating spill clean-up procedures. Provides guidance and support to the Emergency Department and Environmental Services on patient decontamination operations.	**Met**	EH&S responds to calls by ZSFG Facility Services to provide backup to hazardous material spills. EH&S also assesses and gives recommendations regarding the response to chemical or other hazardous material incidents located on the ZSFG campus.
Regulatory Agency Liaison Represents ZFGH during Cal/OSHA and environmental inspections, ensures that hazardous materials Business Plan is updated, and other activities, upon request.	**Met**	EH&S assisted with the following Inspections conducted for the fiscal year of 2023-2024. a. Dept. of Environmental Health Medical Waste conducted on 11/9/2023. b. Dept. of Environmental Health Hazardous Materials Business Plan conducted on 5/21/2024. c. The Joint Commission EH&S Survey conducted on 2/15/2024. Hazardous Materials and Business Plan has been updated through the CERS website. HMUPA permits updated.

PERFORMANCE METRICS

The following metrics provide the Environment of Care Committee with information needed to evaluate performance of the Hazardous Materials and Waste Management Program activities and to identify further opportunities for improvement:

Objectives	Met / Not Met	Comments and Action Plans
Chemical Inventory Updates	**Met**	EH&S has conducted a walk-through on buildings 5 and 25 and listed the hazardous materials stored in each unit in an inventory list. EH&S also provided each unit that stores and uses hazardous materials a hard copy of the SDSs binder.
Chemo-Spill Response		Updated the chemo-spill kits on the following units 3M, 4C, Pharmacy Storeroom, AOD, H54, H56, PreOp, Pac U, OR, and In-pt RX. Updated the chemo-spill kits expired September 28, 2024, with a new expiration date (TBD).

The Environment of Care Committee has evaluated the objectives and determined that objectives have been met. The Program continues to direct hazardous materials and waste management in a positive proactive manner.

EFFECTIVENESS

Effectiveness is based on how well the scope fits current organizational needs and the degree to which current performance metrics result meet stated performance goals. The Environment of Care Committee has evaluated the Hazardous Materials and Waste Management Program and considers it to be effective.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2024-2025

- Continue to work with PHL for their move to the ZSFG campus.
- Work with the facility to finalize the move of the hazardous waste shed.
- Work with Stericycle or Clean Harbors for their online hazmat and hazardous waste training to provide for staff who handle hazardous materials and waste.
- Work with departmental managers for the annual chemical inventory update and SDS updates.

IV. MEDICAL EQUIPMENT MANAGEMENT

The purpose of the Medical Equipment Management Program is to support a safe patient care and treatment environment at Zuckerberg San Francisco General Hospital (ZSFG) by managing risks associated with the use of medical equipment and clinical engineering technology. The program includes processes for selection and maintenance of equipment that are based on the risks associated with the equipment.

SCOPE

The program applies to all personnel, patients, and occupants of ZSFG that includes its main campus. The Biomedical Engineering Department will collaborate with the clinical staff to promote a culture of safety, identify medical equipment located on the main campus, and assign a maintenance strategy.

ACCOMPLISHMENTS

Activities:

- ICU purchased 140 Boehringer suction regulators to furnish each of their patient rooms.
- ZSFG leadership approved the funding to upgrade the Philips telemetry system from revision B to revision 4
    - Awaiting approval to fund the expansion of the Philips telemetry to H25 (Labor and Delivery)
- Continue improving the tracking and completion of medical device recalls through the ECRI platform
- Implemented a process with Biomedical Engineering's Clinical System Engineer to track medical devices on the DPH network by using the Medigate platform
- Continue sending clinical departments (Anesthesia and ICU) bi-weekly repair work order reports

Developing People (Completed Training):

- Draeger BabyLeo TN500 (Incubator/Radiant Warming Units, Infant, Mobile)
- Philips Healthcare PICiX 4 biomed basic overview
- Philips Healthcare ITS & MX40 telemetry and cableless devices for PICiX
- Vyaire Medical LTV 1200 (LS/Ventilators, Intensive Care)

Safety:

- Baxter Prismax V2 (LS/Hemodialysis Units, Renal, Continuous Replacement Therapy)
    - Software version updated to 3.3
- Philips Respironics Trilogy EV300 (LS/Ventilators, Noninvasive Positive Pressure)
    - Software version updated to 1.05.10.00
- Belmont Technologies RI-2 (Warming Units, Blood/Intravenous Solution)
    - Installed new IPX6 power cord
- Medtronic Valleylab FT10 (Electrosurgical Units, Monopolar/Bipolar)
    - Software version updated to 4.0.4

  Baxter field service technicians came onsite to complete software version V8.01.00 updates on all our Spectrum V8 Infusion Pumps.

PROGRAM OBJECTIVES

The Objectives for the Medical Equipment Management Program are developed from information gathered during routine and special risk assessment activities, annual evaluation of the previous year's program activities, performance measures, information collection and environmental tours.

Objectives	Met/Not Met	Comments and Action Plan
Key Performance Metrics • Manage 100% of high risk (life support) medical equipment • Manage 100% of non-high risk medical equipment	**Met**	Biomed managed 100% of high risk and non-high risk medical equipment during FY23-24.
Reduce maintenance and repair service costs	**Met**	Continue training Biomedical Technicians to increase the number of medical devices that can be serviced in-house.
Biomedical technicians to complete 25% of monthly PMs each week	**Met**	Biomedical Technicians continue completing 25% of their monthly PMs on a weekly basis.

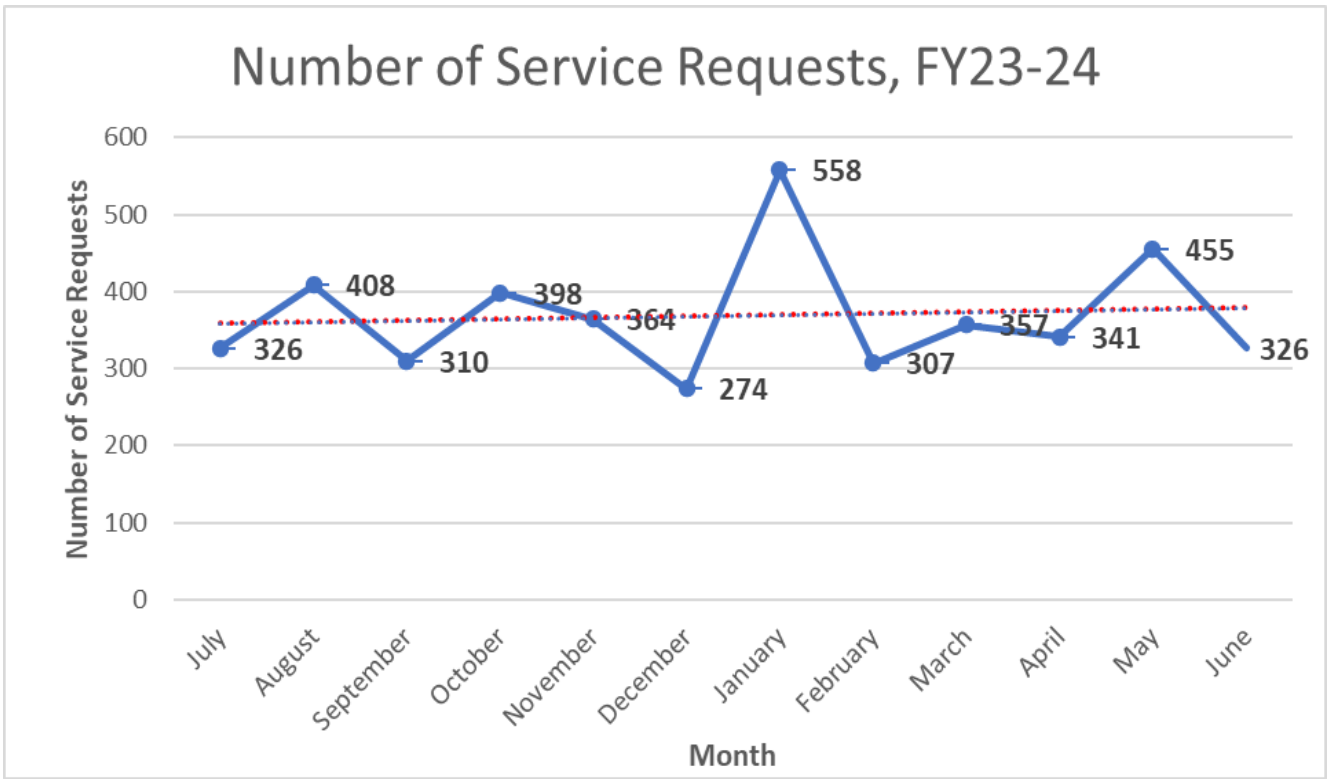
PERFORMANCE METRICS

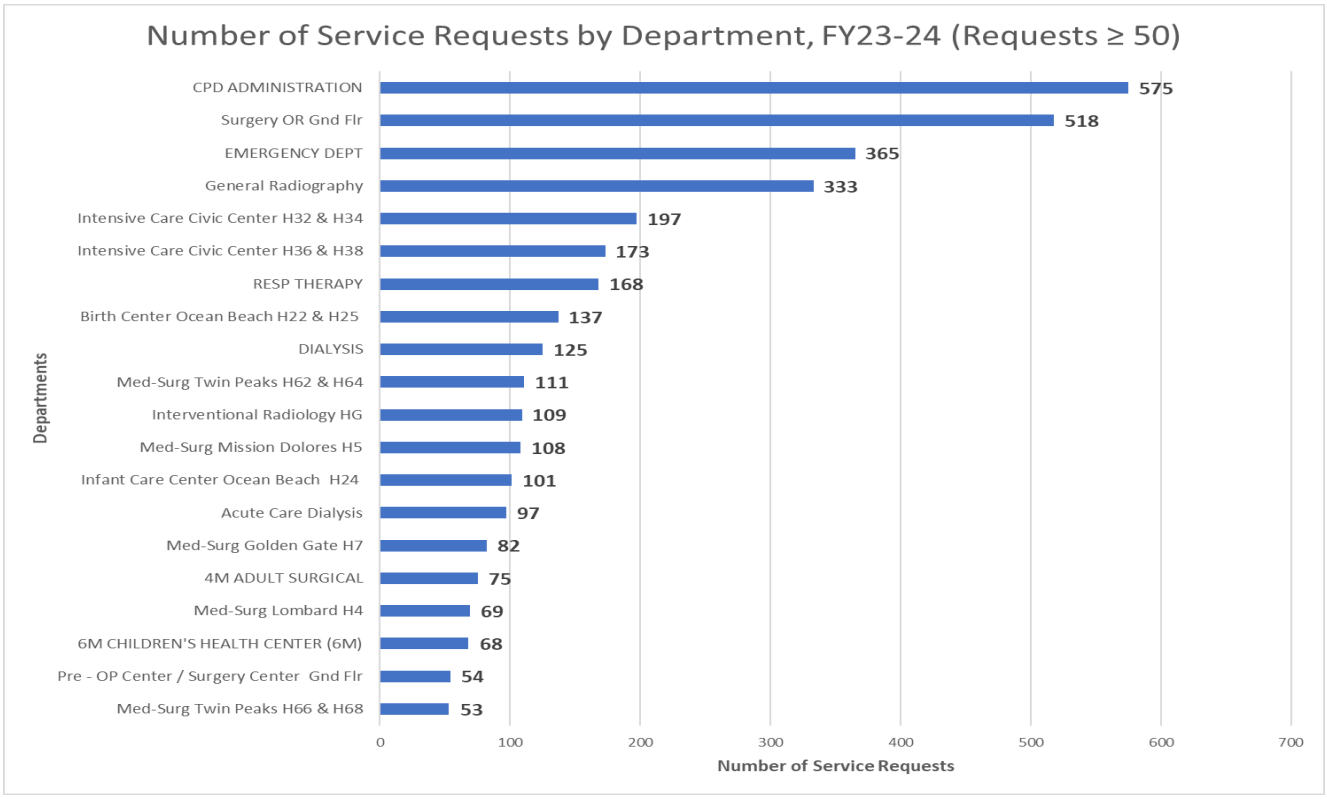
Preventative Maintenance:

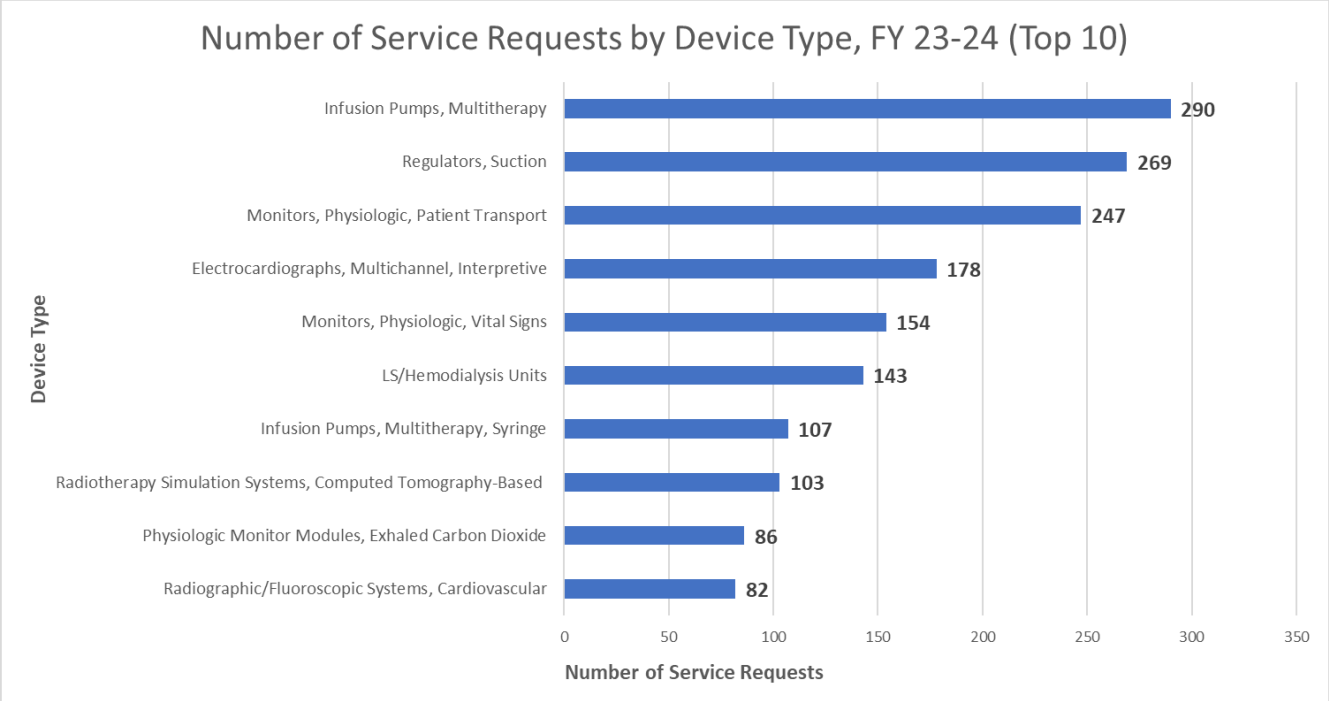
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
High Risk (Life Support)												
Number of PMs	136	37	22	27	87	152	79	42	22	20	45	80
Completion Percentage	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	90%	100%
Number of Devices Not Located	0	0	0	0	0	0	0	0	0	0	0	0
Number of Devices Pending Service	0	0	0	0	0	0	0	0	0	0	0	0
Number of Devices Unavailable	0	0	0	0	0	0	0	0	0	0	0	0
Percentage Managed (Goal: 100%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Non-High Risk												
Number of PMs	528	649	481	605	987	659	681	579	1568	859	526	542
Completion Percentage	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of Devices Not Located	0	0	0	0	0	0	0	0	0	0	0	0
Number of Devices Pending Service	0	0	0	0	0	0	0	0	0	0	0	0
Number of Devices Unavailable	0	0	0	0	0	0	0	0	0	0	0	0
Percentage Managed (Goal: 100%)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Service Request Activities:

Categories	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Number of Service Request	326	408	310	398	364	274	558	307	357	341	455	326
Number of devices retired	15	33	59	84	29	15	43	48	41	78	19	24
Number of initial inspections performed	108	88	110	38	50	44	57	67	50	96	193	83
Number of UO reports	8	8	10	4	8	4	3	0	4	2	2	5
EOC rounds survey	8	8	10	4	8	4	3	0	4	2	2	5
Repair turnaround time (High Risk and Non-High Risk), days	7.99	8.90	4.83	7.73	6.13	5.38	8.89	8.19	4.70	7.56	6.89	5.21
Repair turnaround time (High Risk), days	6.40	3.29	4.41	5.74	4.61	4.00	6.34	7.43	4.81	8.03	4.13	0.85
Repair turnaround time (Non-High Risk), days	8.22	9.49	4.90	8.00	6.29	5.57	9.11	8.25	4.69	7.51	7.16	5.64


Number of Service Requests, FY23-24
Number of Service Requests
600
500
400
300
200
100
0
326
408
310
398
364
274
558
307
357
341
455
326
July
August
September
October
November
December
January
February
March
April
May
June
Month


Number of Service Requests by Department, FY23-24 (Requests ≥ 50)
Departments
CPD ADMINISTRATION 575
Surgery OR Gnd Flr 518
EMERGENCY DEPT 365
General Radiography 333
Intensive Care Civic Center H32 & H34 197
Intensive Care Civic Center H36 & H38 173
RESP THERAPY 168
Birth Center Ocean Beach H22 & H25 137
DIALYSIS 125
Med-Surg Twin Peaks H62 & H64 111
Interventional Radiology HG 109
Med-Surg Mission Dolores H5 108
Infant Care Center Ocean Beach H24 101
Acute Care Dialysis 97
Med-Surg Golden Gate H7 82
4M ADULT SURGICAL 75
Med-Surg Lombard H4 69
6M CHILDREN'S HEALTH CENTER (6M) 68
Pre - OP Center / Surgery Center Gnd Flr 54
Med-Surg Twin Peaks H66 & H68 53
0
100
200
300
400
500
600
700
Number of Service Requests



Medical Device Recalls/Hazard Alerts:

Manufacturer and Model	Device type, Issue, Solution
MAQUET Medical Systems USA A Getinge Group Co; Cardiosave Hybrid; Circulatory Assist Units, Cardiac, Intra-Aortic Balloon	Issue 1: There have been reports of IABP units losing the ability to charge batteries in one or both bay slots due to a failure in the Power Management Board Charging Path Circuitry due to damage to the component from a previous electrical surge. Therapy may be interrupted if batteries fail to charge, and the device is disconnected from AC power. Low battery alarms may alert the User to the issue prior to interruption of therapy. Datascope/Getinge is developing a hardware correction to address this issue. A Datascope/Getinge service representative will contact you to schedule the installation of the correction if your unit is affected as the correction kit becomes available. This work will be done at no cost to your facility. Issue 2: An unexpected shutdown of the IABP may occur due to failures of tantalum capacitors in the Power Management

	Board and/or Solenoid Board. This issue may lead to an unexpected interruption of therapy. Datascope/Getinge is developing a hardware correction to address this issue. A Datascope/Getinge service representative will contact you to schedule the installation of the correction if your unit is affected as the correction kit becomes available. This work will be done at no cost to your facility.
Philips Respironics Inc.; Trilogy EV300; Ventilators, Noninvasive Positive Pressure	Philips Respironics has discovered, through internal testing, that accuracy of delivered oxygen may deviate below the required tolerance of 5% from setpoint when providing high concentration oxygen therapy. Additionally, if equipped, the internal FiO2 sensor may indicate a value higher than the device is actually delivering. This may vary based on the patient's lung capacity, lung resistance, use of a particulate filter, or circuit configuration. In the worst case, this may lead to under delivery of oxygen. Philips Respironics will release a software update that will address the issue. This software will be available free of charge to all Trilogy EV300, Trilogy Evo O2, and Trilogy Evo Universal users. Additional details will be provided when the update is available.
MAQUET Medical Systems USA A Getinge Group Co.; Cardiosave Hybrid; Circulatory Assist Units, Cardiac, Intra-Aortic Balloon	Issue #1: Docking/Power Battery Failure • Should the Cardiosave not be seated in the cart properly, the device will not receive AC power and will run on the battery(ies). Therapy will be interrupted once the batteries are exhausted and if the user is unaware that the Cardiosave is not seated correctly. Interruption of therapy upon battery depletion will be unexpected, as the user will presume that the device is running on AC power, Additionally, if the Cardiosave is not seated in the cart properly, it will not receive AC power and the Cardiosave will not be able to charge the battery(ies) inserted. Issue #2: Poor or No ECG Signal • Poor or no ECG signal before or during therapy with the Cardiosave IABP can be caused by several factors such as

	poor-quality skin-electrode, faulty ECG lead, or defective trunk cable.
MAQUET Medical Systems USA A Getinge Group Co.; Cardiosave Hybrid; Circulatory Assist Units, Cardiac, Intra-Aortic Balloon	Issue #1: Autofill Alarms • Autofill failures are a means of communicating to the User that a feature of the IAB or IABP is unable to deliver therapy. The alarm state is an intentional means to prompt the user for patient or device assessment and/or intervention. Autofill failure is not always indicative that there has been a product compromise or failure. However, for those Autofill failures that result from an equipment failure that the User cannot address directly, a prolonged interruption may be experienced until an alternative console can be identified. Further, if one is not available, or the patient is in transport, therapy cannot be continued. Issue #2: Gas Loss & Gas Gain Alarms • The Gas Loss & Gas Gain alarms trigger when there is a chance in the volume of gas in the IAB catheter and tubing through to the female luer port of the Cardiosave IABP. This situation can be caused by loose connections and/or abrasions to the tubing/catheter. In addition, patients that are febrile or tachycardic may experience a high rate of gas loss due to diffusion through the balloon membrane. If the Cardiosave IABP systems detects a volume change of ±5cc within 1 hour, a “gas Gain in IAB Circuit” or “Gas Loss in IAB Circuit” high priority alarm message will be displayed, an audible alarm will be activated, and pumping will be suspended until the alarm is cleared. Corrective action can be obtained by passing the Help Available key. Issue #3: System Over-Temperature • Should the IABP internal temperature exceed a threshold of 80°C, the Cardiosave interrupts therapy by placing the pump in Standby and notifies the User of the event. Although the User is notified of the event by both audible and visual notification, the resulting standby mode is sudden and requires immediate User intervention to either provide alternative or supportive therapy to the patient.

	Issue #4: Fiber Optic Damage • The Fiber Optic connector is designed to fit smoothly into the IAB Sensor input. The red triangle on the top of the connector should align with the red triangle on the Cardio save Console. Inserting the Fiber Optic connector into the port without verifying the correct alignment can lead to internal damage. If difficulty is encountered when inserting the connector, verify that the connector is in the correct position and attempt to reinsert into the IAB Sensor input. Datascope/Getinge is in the process of developing an addendum to the Cardiosave IABP Instructions for Use to document new warning(s), caution(s), and/or action(s) to be taken by the User to minimize the risk of harm caused by the aforementioned system conditions. Upon completion, it is anticipated the addendum will be released with all new products, and distributed via Datascope/Getinge's website. Furthermore, as complaints are continuously monitored and evaluated, Datascope/Getinge may develop longer term design solutions.
Baxter International Inc.; Prismax V2 US; Hemodialysis Units, Renal, Continuous Replacement Therapy	Baxter Field Service Engineer came on-site and completed the software version 3.3 update.
Baxter International Inc.; Thermax US; Infusion Pumps, Blood/Solution Warming	Baxter Field Service Engineer came on-site and completed the software version 3.3 update.
Medtronic Minimally Invasive Therapies Group (MITG); Valleylab FT10; Electrosurgical Units, Monopolar/Bipolar	As a part of the investigation into this issue, it was noted that upon insertion of a new (unused) LigaSureT device, the ValleylabT FT10 Energy Platform running software versions 4. 0. 1, 4. 0.2 and 4. 0. 3 may erroneously indicate that the LigaSureT device was used previously. When this occurs, the energy platform will display error "E420 Usage Limit" or error "E416 Unknown Instrument, " and the LigaSureT device would not be allowed to be used. Through 07-November-2023, there have been 1 13 complaints for this issue. Upgrading the ValleylabT FT1 0 Energy Platform to the newly released software version 4. 0.4 will eliminate this issue.

	Updated software to version 4.0.4 using Medtronic VLEx program.
Belmont Instrument Corp; Rapid Infuser 2; Warming Units, Blood/Intravenous Solution	In 2022, Belmont Medical Technologies updated the power cord used with the RI-2 Rapid Infuser from locking cord to non-locking cord with a moisture guard to better protect the RI-2 device from water ingress into the power entry module in the event of fluid spilling on the cord. We have distributed the non-locking power cord with the moisture guard to all facilities that purchased devices with the locking cords. It came to our attention that some cords were potentially not delivered to the correct recipient and therefore were not installed on the devices. It is our recommendation that all locking power cords used on the RI-2 device are replaced with the non-locking cords with the moisture guard. We are requesting that you kindly review your RI-2 devices to verify that the power cord(s) used is the non-locking power cord with moisture guard. Locking power cord was removed, replaced with new power cord provided by Belmont. Clinical staff was updated on changes to power cord.
Bayer Corp.; Xperion (3038162); Injectors, Contrast Media, Angiography	Bayer is aware of the recently disclosed remote code execution vulnerabilities affecting Mirth® Connect, a third-party, open-source healthcare data integration platform. These vulnerabilities impact NextGen Mirth Connect 4.4.0 and prior versions. The vulnerabilities allow attackers to remotely execute arbitrary commands on the hosting server (CVE-2023-37679 and CVE-2023-43208). Bayer Support confirmed that all patches were automatically pushed.
Welch Allyn; Connex ProBP 3400; Monitors, Physiologic, Vital Signs	Baxter is issuing an Urgent Medical Device Correction for the power cords used with the Welch Allyn Connex ProBP 3400 Digital Blood Pressure Device and Welch Allyn Spot Vision Screener. Baxter received reports of an issue related to the construction of the power cord not meeting the insulation rating per country-specific requirements and international electrical standards. The affected

	product was distributed to customers in the United States between 2/28/2017 to 4/5/2022. Actions to be taken by the Customers. 1. Inspect the condition of the power cords. If fraying or other damage is observed, users should discard the power cord immediately. 2. Healthcare providers may continue to use the affected power cords after they are inspected for damage. 3. Healthcare providers should regularly inspect the power cords for fraying or other damage. 4. Once Baxter has replacement power cords, a follow-up notification will be sent with additional instructions on how to request replacement power cords.
Welch Allyn; Spot Vision Screener VS100; Analyzers, Physiologic, Visual Function	Baxter is issuing an Urgent Medical Device Correction for the power cords used with the Welch Allyn Connex ProBP 3400 Digital Blood Pressure Device and Welch Allyn Spot Vision Screener. Baxter received reports of an issue related to the construction of the power cord not meeting the insulation rating per country-specific requirements and international electrical standards. The affected product was distributed to customers in the United States between 2/28/2017 to 4/5/2022. Actions to be taken by the Customers. 1. Inspect the condition of the power cords. If fraying or other damage is observed, users should discard the power cord immediately. 2. Healthcare providers may continue to use the affected power cords after they are inspected for damage. 3. Healthcare providers should regularly inspect the power cords for fraying or other damage.

	4. Once Baxter has replacement power cords, a follow-up notification will be sent with additional instructions on how to request replacement power cords.
ZOLL Medical Corp.; 731; LS/Ventilators, Intensive Care	ZOLL Medical Corporation is voluntarily recalling a limited number of Operator's Guides and Quick Reference Guides related to 731 ZOLL Ventilators with MRI compatibility. This letter describes the issue and actions that must be taken to address the problem. Through an internal review of product manuals, it was identified that documented Patient Safety Ventilator MRI information was inadvertently omitted from the manuals. We are currently in the process of updating these manuals. The impacted manuals only state to place the ventilator behind the 2000 Gauss line. The updated language has been changed to: You must place the ventilator behind the 130 Gauss field line (approximately 2 meters to the bore opening of a 3T MRI magnet). This update to the instructions ensures safe distance from the MRI to ensure proper function of the ventilator and reduce the risk of delay in ventilator therapy. ZOLL continues to offer and recommend the use of 12 ft (3.7 m) patient circuits to accommodate the length required to place the ventilator at a safe distance from the MRI bore. AFFECTED DEVICES All Operator's Guides and Quick Reference Guides specific for use with MRI Compatible 731 ZOLL Ventilators. • Operator's Guide, ZOLL Ventilator (9650-002363-01 Rev E) • Operator's Guide, Eagle II/AEV (9650-002365-01 Rev B) • Quick Reference Guide Eagle 2, EMV+, AEV (9652-000499-01, Rev B) • Quick Reference Guide (9652-000511-01 Rev A) • Operator's Guide (906-0731-01 Rev L) • Quick Reference Guide (907-0731-04 Rev B)
Belmont Instrument Corp.; Rapid Infuser 2; Warming Units, Blood/Intravenous Solution	Problem

	1. Belmont RI-2, FMS 2000, and Hyperthermia Pumps may not infuse or may stop infusing because of Valve Wand failure. 1. One or more of the three screws that affix the Valve Wand motor onto the chassis may become loose or break. In some cases, the screw holes in the chassis may have become enlarged and the infuser's chassis may require replacement (see Figure 1). Figure 1. (A) Valve Wand, (B) Valve Wand removed showing three screws that attach the Valve Wand motor to the chassis, (C) Chassis with valve wand motor removed. All images are taken from the exterior of the front chassis. 1. If the screws are loose or if the screws break, the Valve Wand will not function properly, causing the valve to malfunction; the unit should display error 208 and request a restart. The restart will not be possible, and the unit will cease to operate and will require a replacement. 2. The devices deliver critical lifesaving fluids and blood at a potentially very high rate, and interruption of the fluid or blood delivery can cause patient injury or death. ECRI Recommendations: Note: ECRI's recommendations are based upon ECRI's experience and our scientific team's opinions specific to this Alert, at the time that the recommendations are issued. These recommendations may differ from the manufacturer's recommendations, and your organization should consult with internal experts before implementing ECRI's recommendations. Clinical Engineering staff 1. As soon as clinically feasible, verify that the screws holding the Valve Wand motor are not broken, are tight, and are not corroded. 1. Remove units with broken screws from service for repair. Have replacement screws available. 2. If the screws are broken or loose, verify that the screw holes are not damaged or corroded. Loose

	screws may contribute to screw failure and also cause the screw holes to enlarge, resulting in motor looseness and Valve Wand malfunction. 3. If any of the screw holes are damaged, contact Belmont Medical Technologies for chassis replacement. Request a loaner device if necessary. 4. Add the task of verifying that the motor screws are not broken, are tight, and are corrosion free to the RI-2 yearly preventive maintenance (PM). 5. As per the Belmont Medical Technologies instructions, apply Loctite 242 to each clean screw and tighten using a torque of 10 inch-pounds. Loctite 242 is available for order from Belmont Medical Technologies. The Part number is 013-00007. 6. If possible, have a replacement Rapid Infuser accessible in case of failure. 7. Report problems to Belmont Medical Technologies, ECRI, FDA, or Health Canada. Background: 1. An ECRI member reports that in a trauma situation, a Belmont RI-2 Rapid Infuser failed to start because of a Valve Wand error, 208. 2. The device valve motor is responsible for moving the Valve Wand from open (i.e., vertical) to the left or right valve closed positions. The Valve Wand provides a flow path to the patient or a recirculation fluid path within the system. The Valve Wand closes off the recirculation line when the system is in the infusion mode and closes off the infusion line when the system is in the recirculation mode. It immediately closes the infusion line to the patient when an error condition occurs, which may require user intervention. The recirculation path is used to prime the system and eliminate air after an air detection alarm. The recirculation path is activated for all alarm conditions. 3. This failure was caused by broken Valve Wand motor screws. 4. Subsequent inspection by the facility of several Belmont Rapid RI-2 infusers found broken and/or loose Valve Wand motor screws.

	5. The RI-2 preventive maintenance procedure does not include inspecting the screws. However, the service manual recommends performing a test of the Valve Wand in Chapter 7. 6. Although the reporting facility had this problem with RI-2, the FMS 2000 and the Hyperthermia Pump have this same Valve Wand design and are also affected by this problem. Manufacturer Perspectives: Belmont Medical Technologies states: 1. During use of the equipment, the Valve Wand is in frequent motion as it clamps and unclamps either the patient line or the recirculate line. This frequent motion can cause the three screws that secure the diversion valve motor to the housing to loosen over time. 1. To prevent this from occurring, Loctite 242 adhesive should be applied to each screw and the screws should be tightened to a torque of 10 inch-pounds. 2. Loctite must be applied to clean screws. Any visible residue must be cleaned off prior to application the Loctite. Once Loctite is applied and the screw secured, the screw should not be removed, tightened, or loosened to ensure the Loctite bond remains intact. 3. Belmont has introduced this change in all products manufactured after July 1, 2021. Belmont implements this on every unit that is returned to Belmont for PM or a repair. Belmont's worldwide service partners were informed of this change and a recommendation was provided to inspect the screws and implement the addition of the Loctite during the next PM or service. 4. Belmont is updating the service manual and the user manual to include inspection of the Valve Wand motor screws. An updated user manual will be published on Belmont's website in the near future. 5. Belmont is not aware of this problem causing chassis damage or the need for a replacement chassis. 6. Belmont recommends inspecting the valve motor screws on any unit that was manufactured prior to July 2021. Contact Belmont if you have any questions or need new hardware at (855) 397-4547 (U.S.), +1 (978) 663-0212 (worldwide), or

	TECHSUPPORT@BELMONTMEDTECH.COM.
Verathon Inc; GlideScope Core 15; Laryngoscopes, Video	Verathon's investigation confirmed that with these unique combinations that a video signal delay issue can contribute to a degradation in image quality, a loss of image, or the airway cannot be visualized. This may lead to a delay in the procedure until a replacement or alternative device is obtained, which may cause serious injury. Actions Required by You: Our records indicate that your facility has received one or more GlideScope Core 15 or Core 15 FHD monitors along with the 0600-0843 Core 2m QuickConnect cable. Please take the following actions to install the software correction via the USB. 1. Plug your GlideScope Core 15 or Core 15 FHD into the power supply and connect to a hospital-grade power outlet. 2. Use the enclosed USS drive with the corrective software upgrade and related instructions to upgrade your GlideScope Core 15 or Core 15 FHD monitor(s) (approximately 5-7 minutes for the upgrade). 3. Verify the software version on the Administrative Settings tab. 4. Contact Verathon Customer Care to contact your Territory Manager to perform the upgrade at your facility. 5. Complete the Correction Response Form in this packet and return it to Verathon via email to CSNotifications@verathon.com.
Fresenius Medical Care North America; 2008T, 2008T BlueStar Premium, 2008K2; LS/Hemodialysis Units	The purpose of this notification is to inform you that an updated Blood Pump Rotor design (Part Number, F40015481, Rev C) is now available. Fresenius Medical Care updated the Blood Pump Rotor design due to previously reported failures in the field. It was reported the Blood Pump Rotor guidepost (pin) sleeves were coming loose. The snap fit retention feature of the guidepost sleeve can wear causing the sleeve to come loose exposing the metal guide post and, in some cases, causing blood line damage. There have been reports of blood line damage that resulted in minor blood loss and in one case, a suspected air infusion, which resulted in a machine alarm.

	The blood Pump Rotor design was changed to improve the retention of the guidepost sleeves by using a captured roller retention design, see Figure I below. As per the 2008T Operators Manual PIN 490 I 22 Rev AA: Blood Pump Rotors should be inspected for proper operation, as stated in Chapter 2: Daily preparation for treatment: • If you experience a dislodged guide post sleeve, bent or loose tubing guide posts, or roller cannot move freely on your current parts: F40014866 (Blood Pump Rotor) or F40015481 (packaged version of Blood Pump Rotor as a spare part), please contact Fresenius Medical Care Customer Service at 800-227-2572, OPTION 3, for a replacement Blood Pump Rotor. o Please have Blood Pump Rotor Part Number and Lot Number available when requesting a replacement. • Report any complaints or adverse events to product.cornplaints(lMinc-na.com or FDA MedWatch at https://www.fda.gov/safety/medical-product-safety-inforrnation/medwatch-forms-fda-safety- reporting. • Provide this Customer Notice to all those who need to be aware within your organization. • Complete and return the attached reply form. Biomedical Technician actions: • A Field Service Bulletin will be posted to fmcna.com website regarding Preventative Maintenance activities for Blood Pump Rotor Tubing Guide Inspection of the need to inspect the blood pump tubing guides during the 6-month Preventive Maintenance on all 2008 Series Hemodialysis Machines. URL: https://fmcna.com/support/product-support-documents/field-service-bulletins/ • For Technical Issue questions please contact Technical Support Services at 800-227-2572 OPTION 4.
Ambu Inc.; aView 2 Advance; Monitors, Video	Ambu has received information on two incidents where Ambu® aView™ 2 Advance caught fire when mounted on the VESA holder of the aCart™ Compact, due to incorrect length screws used penetrating the lithium-ion battery of the device. No patients or staff members were harmed during the incidents. VESA holder is a generic standard that specifies dimensions of screw-holes for mounting Ambu® aView™ 2 Advance to aCart or stand. Regardless of whether your

	use aCart™ Compact or any other brand medical workstations with VESA holder, use of longer screw lengths could result in a similar fire hazard. Packaging of aCart™ Compact includes several choices of screw lengths (12, 16, 20, 30 mm) as VESA holder is usually used for external medical monitors. In these two cases, customers mounted Ambu® aView™ 2 Advance on the VESA holder using too long screws meant for external monitors. Upon conducting a comprehensive investigation, we have identified the root cause of these incidents. The fire hazard was a direct consequence of a battery short-circuit, which, in turn, was triggered by the use of excessively long screws to secure the device on the VESA holder. The longer screw lengths inadvertently penetrated the lithium-ion battery, leading to the fire hazard. Since VESA option is available in the product design, we want to inform our customers of the risk of penetrating the lithium-ion battery when using too long screws for mounting. At the same time, we would like to inform our customers on how to securely fasten the Ambu® aView™ 2 Advance. In case your Ambu® aView™ 2 Advance is placed on a table or mounted on an IV pole as recommended practice there is no risk of screw penetrating the battery during mounting and associated fire hazards. We urge our customers to be aware of the below Warning applicable to the Instructions for Use of Ambu® aView™ 2 Advance: WARNING: Use only M4 screws with the length of 14 – 16 mm when mounting Ambu aView 2 Advance on a VESA interface. Using longer screw lengths will penetrate the lithium-ion battery and result in a fire hazard and battery leakage which can cause severe burns, smoke inhalation and skin irritation. Using shorter screw lengths could result in unsecure device fastening. The information in this Field Safety Notice is relevant for all versions of Ambu® aView™ 2 Advance. Please communicate this information to relevant personnel within your organization. Included with the

	Field Safety Notice, you will find an insert for the Instructions for Use for Ambu® aView™ 2 Advance. The insert should be read and kept together with Instructions for Use you received together with your Ambu® aView™ 2 Advance. The information is also included in Appendix 2 of this notice. Ambu A/S is not removing any Ambu® aView 2™ Advance from the field; devices remain available for use and it will not have any effect on endoscopes uses with the Ambu aView 2 Advance monitor. Advise on actions to be taken by user: Within one month of receipt of this letter, please return confirmation of receipt of this Field Safety Notice (appendix 1). Please familiarize yourself with the information in the insert of Instructions for Use and keep the insert together with the Instructions for Use booklet.
Medtronic Surgical Technologies Div Medtronic Inc.; NIM Vital; Monitors, Physiologic, Neurology, Intraoperative	Medtronic is issuing a voluntary correction notice for NIM Vital Nerve Monitoring System due to the potential for a false negative response. Medtronic has developed a NIM Vital software version 1.5.4 to address this issue.

Proposed Performance Improvements, FY23-24	Met/ Not Met	Results
Reduce the number and cost of DPH non-compliant vendors. ▪ The Biomedical Engineering Department currently cannot do business directly with over 30 vendors.	**Met**	The additional cost to do business with non-compliant vendors in FY23-24 was $45,000. The objective was to reduce the annual spending with non-compliant vendors to ≤$40,000.
Manage high risk (life support) medical equipment	**Met**	On a month-to-month basis ensure that all high-risk PMs are managed even if they are not completed within the assigned month. The objective was to manage life support medical equipment 100% every month.

Address medical device recalls/hazard alerts	**Met**	The plan is to address each device recall if the manufacturer provides a solution. The objective was to address 90-100% of medical device recalls.

Proposed Performance Metrics for FY24-25	Target	Comments and Action Plan
Repair Turnaround Time: Track the average time taken to respond to and resolve repair requests.	<5 Days	Continue communication with the Biomed team along with the various vendors to make sure there are no delays in order parts or obtaining on-site/off-site service.
Equipment (ultrasound systems) Downtime: Measure the amount of time equipment is out of service due to maintenance or repair.	<5%	Track the downtime of all ultrasound systems (total: 105) on the ZSFG campus to ensure that the downtime is minimal.
Equipment (ultrasound systems) Reliability: Frequency of equipment failures or malfunctions.	<24 hours	Calculate the Mean time between failures (MTBF) of all ultrasound systems (total: 105) on the ZSFG campus to determine the elapsed time between repairable failures of medical equipment during normal system operation. This would measure the reliability of the device(s).

EFFECTIVENESS

The Medical Equipment Management Program has been evaluated by the multi-disciplinary Environment of Care Committee and is considered effective.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN FY24-25

- Continue working with clinical department leaders to plan the replacement of their medical devices that are considered by the manufacturer End of Life (EOL) and/or End of Support (EOS).
    - Communicate with ZSFG leadership to have a plan in place to determine what medical devices need to be replaced that are considered non-capital

as well as those considered capital purchases that would need to be submitted during the annual capital equipment request cycle.
    - Met 1:1 with clinical department leaders to discuss the capital equipment request process and what the Biomedical Engineering Department recommends.
- Provide further training for all Biomedical Technicians to increase the number of PM and repair services in-house.
    - Reduce the total cost of ownership of medical devices.
    - Reduce the service turnaround time.
- Hire a woman Biomedical Technician that would provide support in the new Outpatient Dialysis area in building 5 that will expand patient stations from 13 to 24.
    - The new area is expected to open by the summer/Fall 2025.

V. SAFETY MANAGEMENT

SCOPE

Safety Management is designed to identify and address potential safety risks in the ZSFG environment. At ZSFG, Safety Management is shared by two complementary programs, Patient Safety and Environmental Health and Safety:

- Patient Safety is a function of Quality Management and oversees the organization's patient safety plan and national patient safety goals. Patient Safety reports via Process Improvement and Patient Safety Committee (PIPS).
- Environmental Health & Safety (EH&S) focuses on staff health, safety, and well-being. The Environmental Health and Safety Department provides consultation, resources and training to create, maintain and improve the hospital's working environment. The goals of EH&S are to reduce or eliminate staff injuries and illnesses and create a safe environment for all persons including staff, patients, clients, and visitors at the ZSFG site. EH&S reports their activities through the Environment of Care Committee in both this chapter and the Hazardous Materials and Hazardous Waste Chapter.

The Safety Management Program's scope encompasses all departments and areas of the ZSFG campus, except for UCSF research activities, which fall under UCSF management.

ACCOMPLISHMENTS

- Continue to work with Infection Control, Facilities, and Capital Projects to define standard procedures and work to prevent releases of hazardous materials (asbestos and lead) during construction and renovation activities and to ensure that health and safety and infection controls were incorporated into projects during

the planning phase.

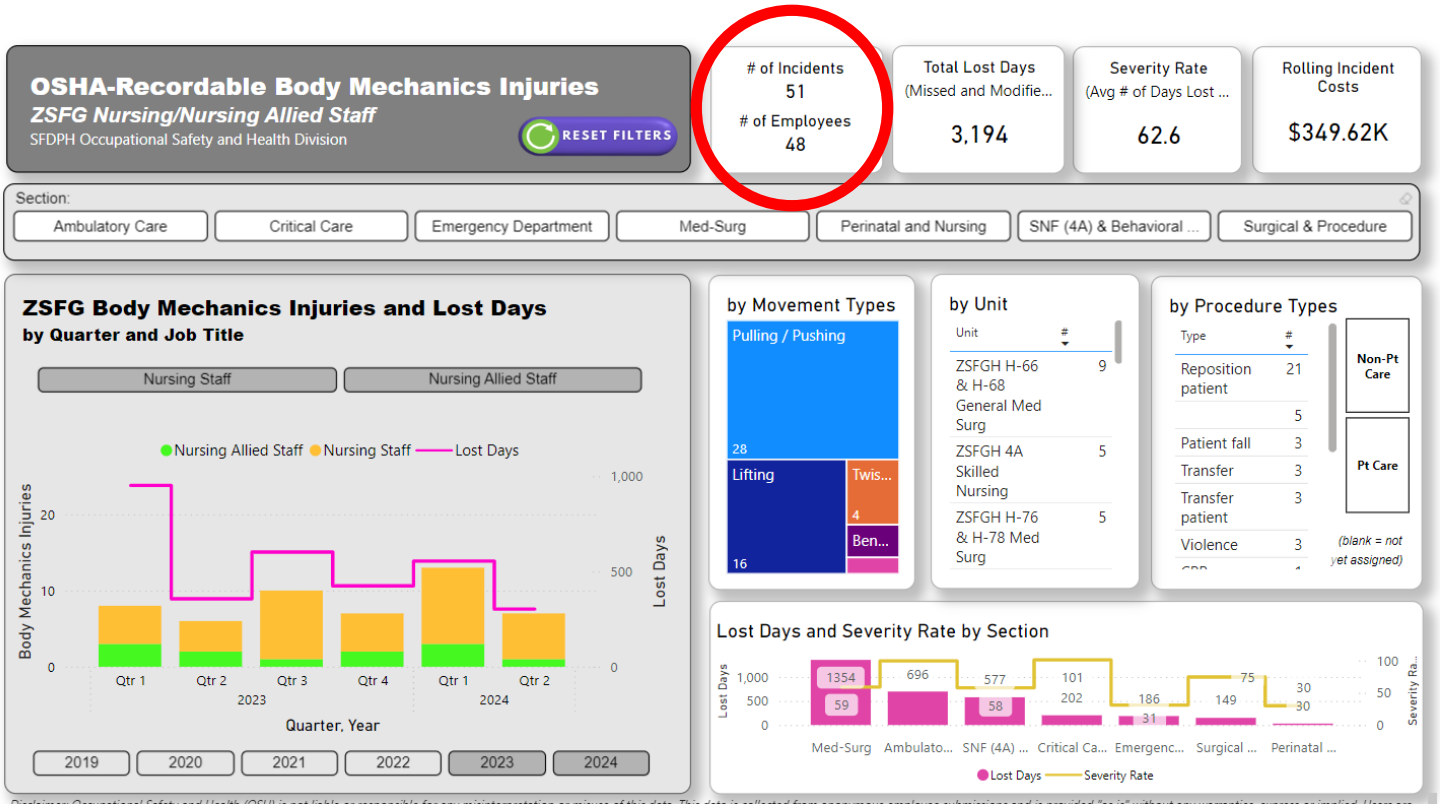
- EH&S is working with OSH, infection control, and HR for the updated Respiratory Protection Program.
- Completed a total of 38 individual ergonomic evaluations for chair fitting and workstation evaluation for this fiscal year compared to 10 last fiscal year.

PROGRAM OBJECTIVES/PERFORMANCE METRICS

The following metrics provide the Environment of Care Committee with information needed to evaluate performance of the Safety Management Program activities and to identify further opportunities for improvement:

Objectives	Met / Not Met	Comments and Action Plans
Ergonomic Assessments and Recommendations Conduct employee worksite assessments and provide recommendations to improve ergonomic functions and adjustments to improve efficiency and comfort and reduce likelihood of staff injuries.	**Met**	EH&S conducted 38 ergonomic evaluations for 2023-2024 fiscal year.
Hazard Assessments Conducts periodic Department Environment of Care surveys, Hazard Vulnerability Assessments, assessments of unsafe conditions reported by empoyees and supervisors, and follow up evaluations of corrective action plans.	**Met**	**EH&S found multiple rooms with shelves not seismically secured.** To minimize the risk of a shelving collapse or falling inventory, shelves must be secured. Continue to work with facility by submitting work orders whenever an unsecured shelf is discovered.
Investigations Investigates or ensures that the following are investigated: Accidents, Unusual Occurrences, and incidents identified by Risk Management. Initiates follow up evaluations, as needed.	**Met**	EH&S investigated for “Very Slick chairs” that causes fall and injury to staff. EH&S have ordered and replaced the casters for the slick chairs to mitigate the issue.

Consultations Upon request, assists Department Managers evaluate and address environmental health and safety issues. Develops and updates environmental health and safety policies and procedures.	**Met**	**EH&S provided assistance to the following safety issues.** a. Noise Monitoring/Survey for seismic repairs b. Indoor Air Quality c. Respiratory Protection Program (RPP) d. CalOSHA Complaints (2068293, 2147936, 2170210, 2209861)
Training and Information Develops and distributes Employee Health and Safety Bulletins, Safety Grams and Safety Alerts, as issues are identified. Develops and delivers department specific environmental health and safety training, disaster preparedness and Incident Command System education and training, and other education and trainings upon request.	**Met**	**EH&S published monthly EH&S newsletter/safety grams. They are available on the ZSFG network.**
Record Keeping Maintain the following records: Environmental Surveys completed by departments; exposure monitoring reports, surveys and assessments, and training materials for work conducted by EH&S.	**Met**	Records available for the following noise surveys, Indoor air quality monitoring. -The kitchen noise survey for Building 25 and Building 5 was conducted on October 4, 2023. - The boiler room noise survey for Building 2 was conducted on October 11, 2023. - ZSFG Seismic Project noise monitoring for building 5, 4A. - ZSFG 4A drilling and chirping noise monitoring. a. - ZSFG 4M saw cut noise monitoring. -Building 5, Room 6D22 indoor air quality assessment.



EFFECTIVENESS

Effectiveness is based on how well the goals are met and how well the scope of the performance metrics fit current organizational needs. Recognizing the significant challenge of reducing staff injuries and given the very limited resources available, the Environment of Care Committee has reviewed the Safety Management Program and found it to be effective, but needs improvement based on the objectives and performance metrics indicated in the Plan.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2024-2025:

- Continue to assist new and existing staff with ergonomic needs.
- Continue to work with Capital Projects for construction noise surveys/monitoring.
- There is a total of 51 reported incidents of body mechanics for 2023-2024. Work with the safety committee to reduce body mechanics injury to 41 or fewer incidents per year.
- There is a total of 142 incidents of blood & body fluid exposure for fiscal year 2023-2024. Work with the safety committee to reduce blood & body fluid exposure to 100 or fewer incidents per year.

The proposed performance metrics for these goals are:

Safety Management Proposed Performance Metrics for 2024-2025	Target	Comments & Action Plan
AIM: Show continued progress in reducing staff body mechanics injury and blood & body fluid exposure.	**Keep recordable injury counts at/or below FY2023-2024 levels.**	Provide refresher training and/or education to all staff or to departments with the highest injury rate activities.

VI. SECURITY MANAGEMENT

SCOPE

The scope of the Security Management Plan is to assure the ongoing provision of a safe, accessible, and secure environment for staff, patients, and visitors at Zuckerberg San Francisco General Hospital Campus. To that end, it is the overall intent of this plan to establish the framework, organization and processes for the development, implementation, maintenance, and continuous improvement of a comprehensive Security Management Program. This program is designed to provide protection through appropriate staffing, security technology, and physical barriers.

The scope of the Security Management Program includes:

- Continuous review of physical conditions, processes, operations, and applicable statistical data to anticipate, discern, assess, and control security risks, and vulnerabilities.
- Ensure timely and effective response to security emergencies.
- Ensure effective responses to service requests.
- Report and investigate incidents of theft, vehicle accidents, threats, and property damage.
- Promote security awareness and education.
- Enforce various hospital rules and policies.
- Establish and implement critical program elements to include measures to safeguard people, equipment, supplies, medications, and traffic control in and around the hospital and the outlying medical offices.

Each management objective is listed in the table below and is marked as met or not met. If an objective is not met, the DPH Director of Security will review the objective, and develop a corrective action plan.

ACCOMPLISHMENTS

- All performance metrics met or exceeded the target.
- Use-of-force decreased 30% (56 to 39 incidents) from the previous fiscal year.
- Reduction in use-of-force ratios per 1K ED visits was less than 1%.
- Responded to over 6,500 calls-for-service.
- Confiscated nearly 4,000 weapons and contraband through Emergency Department Security Weapons Screening.
- Investigated 19-moderate/high risk workplace violence threat incidents (decreased from 23-24, by 17%, 23 to 19) and developed security plans to address the threat and protect the individuals involved.

PROGRAM OBJECTIVES

Objectives	Met / Not Met	Comments and Action Plans
An annual review of the physical conditions, processes, operations, and applicable statistical data is conducted to anticipate, discern, assess, and control security risks, and vulnerabilities. A security management plan is developed, and monitored, quarterly to address security vulnerabilities, and minimize risk.	**Met**	2023-2024 security risk assessments were completed, and the security risks, vulnerabilities, and sensitive areas were identified and assessed through an ongoing facility-wide processes, coordinated by the DPH Director of Security, and hospital leadership. These processes were designed to proactively evaluate facility grounds, periphery, behaviors, statistics, and physical systems.
Ensure timely and effective response to security emergencies, and service request, including the enforcement of hospital rules and policies.	**Met**	Security emergency response times are monitored weekly, and the outcomes are reported to the Security Leadership Committee. Service requests are responded to in accordance with the Security Response Standard Operating Procedures.
Report and investigate incidents of theft, vehicle accidents, threats, and property damage.	**Met**	SFSO quarterly call-for-service data, incident reports: Threat Management and SFSO Crime Report data supports that investigations are initiated for all crimes against persons and facility property.
Promote security awareness and education.	**Met**	Through Environment of Care Rounds, employees are provided security awareness training. Additionally, security awareness and education programs include Non-violent Crisis Intervention, Active Shooter Training and Security Alert publications.
Establish and implement critical program elements to include measures to safeguard people, equipment, supplies, medications, and traffic control in and around the hospital and the outlying medical offices.	**Met**	The Director of Security in partnership with the San Francisco Sheriff's Office collaboratively establishes, and maintains communication and mutual ownership for outcomes, identification and troubleshooting of emergent safety concerns.

PERFORMANCE

Performance Metrics #1	Performance Metrics #2	Performance Metrics #3	Significant Reporting Performance	Significant Reporting Performance
Code Green/At Risk (Patient Elopement)	**Customer Satisfaction**	**Electronic Security System Functionality**	**DPH and SFSO, MOU Performance**	**Employee Security Awareness**
Standard: The security provider will be measured on their performance during Patient Elopements, Patient "At Risk" and Missing Person incidents, including: • Initial Perimeter and Search • Notification of SFPD, BART, and MUNI • Documentation of Search Activity • Locate/Not Located Procedure	**Standard:** A monthly basis survey of 100 customers consisting of patients, visitors, employees, and physicians will be surveyed regarding their overall experience with Security Service/Sheriff's Office.	**Standard:** All electronic security equipment will be inspected monthly for functionality. Facilities, Security Services, and the Sheriff's Operations Center will develop security plans to address vulnerabilities resulting from malfunctioning equipment.	**Standard:** A monthly security provider performance survey will be completed to assess the Sheriff's Office compliance with MOU obligations in the areas of operational performance, issue resolution, management responsibilities and finance provisions.	**Standard:** During Environment of Care Rounds, hospital staff be tested on 6 questions regarding security awareness (See Appendix B.) (Sample size: 300 employees per quarter)
Threshold – 80% **Target – 90%** **Stretch – 100%**	**Threshold - 80%** **Target - 90%** **Stretch – 98%**	**Target: 98%**	**Threshold – 3.0** **Target – 3.5** **Stretch – 4.5**	**Threshold - 80%** **Target - 90%** **Stretch – 98%**

Analysis of Performance Metrics Results and Corrective Action Plan

FY 2023-2024, Annual Performance Metrics

	Target	Overall Performance
Code Green Response (Patient Elopement)	90%	100%
Customer Satisfaction	90%	90%
Electronic Security Systems	98%	99%
San Francisco Sheriff Office MOU Compliance	3.5	3.0
Employee Security Awareness	90%	100%

EFFECTIVENESS

The 2023-2024 significant reporting metrics were developed to further demonstrate the security program's effectiveness. The metrics include Threat and Workplace Violence

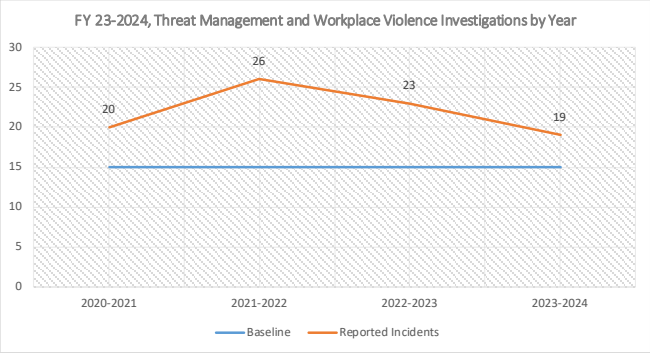
Investigations, Crimes against Persons and Property, Use-of-Force, and Campus Tunnel and Stairwell Patrols.

Threats Management and Workplace Violence Prevention Investigations

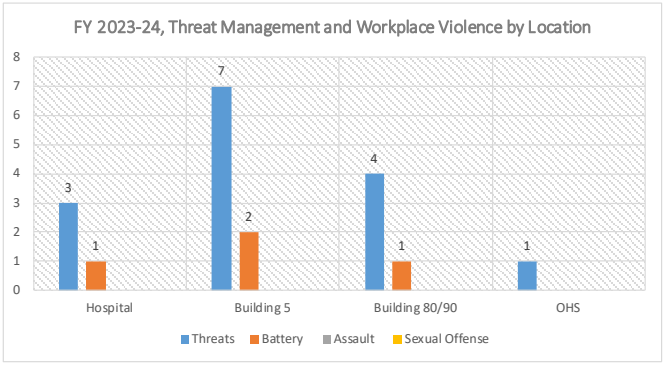
Standard:

Security will investigate reported moderate and high-risk threats where there is reasonable cause to believe that the personal safety of an individual or group of individuals may be at risk.

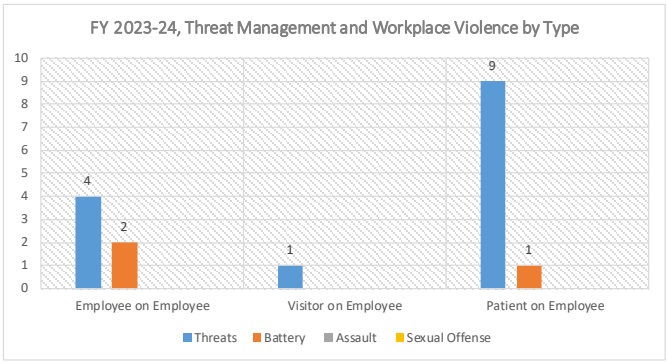
Moderate and High-Risk threats are incidents that required management and security intervention, where it is determined that without specific remedial action, the potential for escalating behavior or the imminent danger of injury or death to one or more individuals is highly probable.



- Over a 4-year period, moderate and high-risk investigations decreased 17%.
- There was a 17% decrease (5 reports) in investigations from the previous year.
- Building 5 lobby accounted for 47% of investigations, and 78% (15 of 19) involving reports of threats.
- Security-plans to address threats and acts of violence, included:

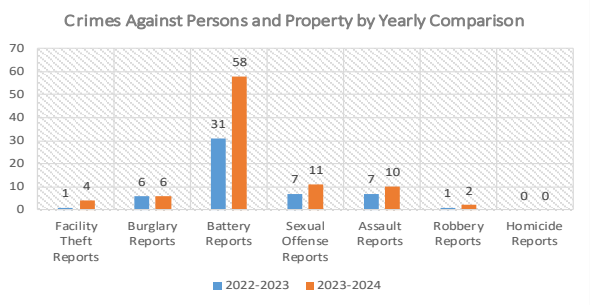


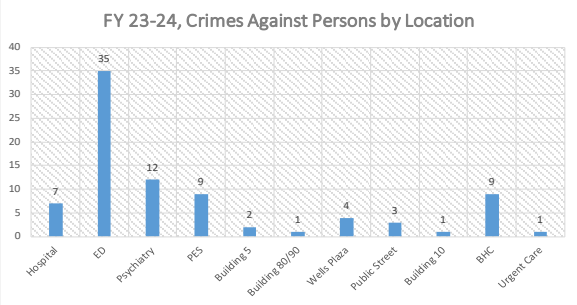
Remedial Action Taken	
Behavioral Plan	4
Transfer of Care	1
Employee Disciplinary Action	4
HR Investigation	2
SFSO Detention	1
UCSFPD Response	1

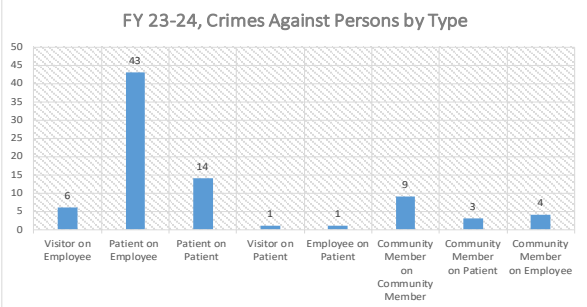


Crimes Against Persons and Property		
Yearly Comparison	**2022-2023**	**2023-2024**
SFSO - Facility Property Thefts Reports (>$900)	1	4
SFSO - Burglary Reports	6	6
SFSO - Battery Reports	31	58
SFSO - Sexual Offense Reports	7	11
SFSO - Assault Reports	7	10
SFSO - Robbery Reports	1	2
SFSO - Homicide Reports	0	0
Total	**53**	**91**

FY 23-2024, Crimes Against Persons and Property Action Taken	
Deputy Arrest	8
Private Person Arrest	22
Citation Issued	11
Psych Evaluation	5
Criminal Investigation Unit	2
Emergency Protective Order	1
Deputy Detention	8





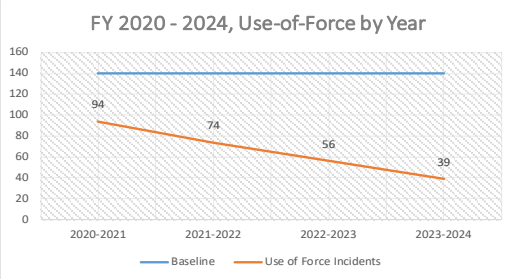


2022-2023 Crimes Against Property by Location		
	Theft	**Burglary**
Building 5	3	
Hospital Building 25	1	1
CHN		1
Building 90		2
Building 80		2

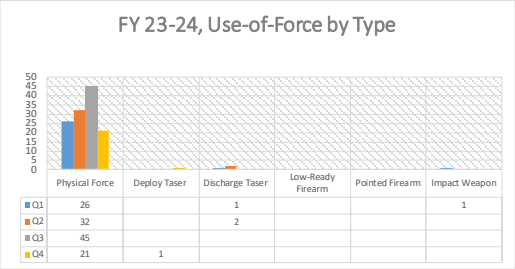
- Reported crimes increased 72% (38 reports) from the previous year.
- Crimes against persons reports increased 76% (46 to 81) from FY 22-2023.
- Patient-on-Employee reports accounted for 51% of crimes against person incidents (43 of 84 reports.)
- Reports from the ED accounted for 23% of person-crimes (35 of 81 reports)
- Thirty-eight percent of victims of physical attack, pressed charges against their assailant (22 of 57).

2023-2024 Use of Force Statistics

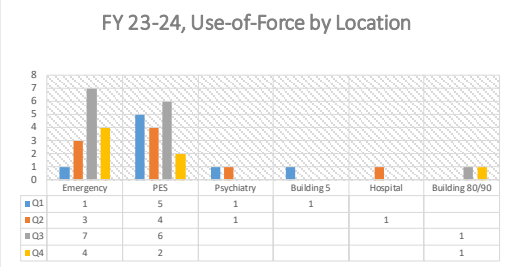
Use-of-force data is tracked of all SFSO incidents occurring on ZSFG campus. In 2022-2023, there were 56 incidents of use-of-force. The data was stratified by the types of force, type of incidents, location, demographics, diagnosis, and reported acts by demographics.



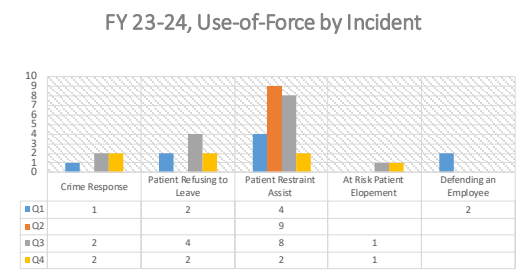
- Since FY 20-21, law enforcement use-of-force has decreased 52
- force decreased 30% (26-incidents.) %.
- From FY 22-23, use-of-



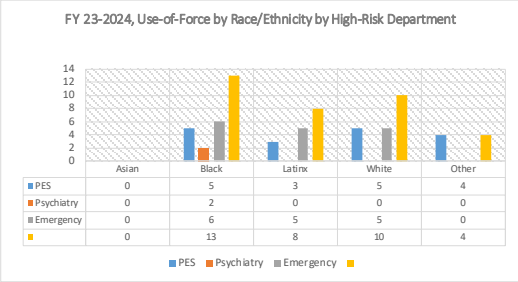
Of the 39 use-of-force incidents, there were 129 types of force used. Physical force accounted for 96% of the force used (124 of 129 types.)



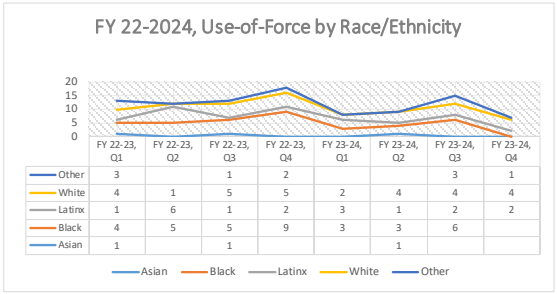
Fifty-eight percent of use-of-force incidents occurred in the Psych Emergency Services,



Deputies assisting with patient restraints accounted for 58% of use-of-force incidents (23 of 40 incidents.)



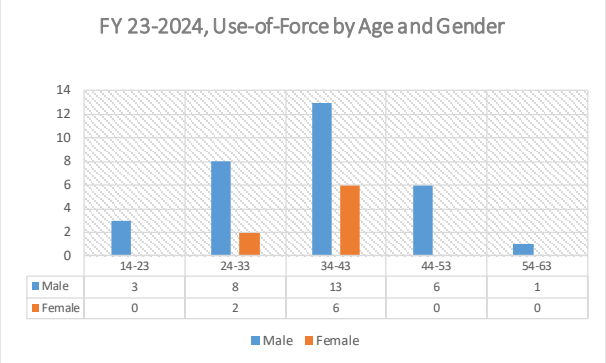
Forty-nine percent of force in high-risk departments occurred in PES where Black/ African Americans were the subjects in 37% of the incidents.



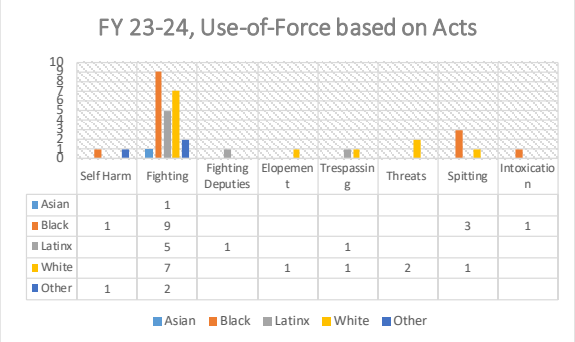
From FY 22-23, use-of-force decreased in all race/ethnicities. Use-of-force against Use-of-force against Caucasians patients were the highest (36%, 14 of 39 incidents).

Use-of-Force by Patient Related Service calls and Clinical Data	
Per 1K Patient Related Service Calls	6
Per 1K ED Registrations	0
Per 1K PES Intakes	0
Per 100 Psychiatry Admissions	4

Use-of-Force (cont.)

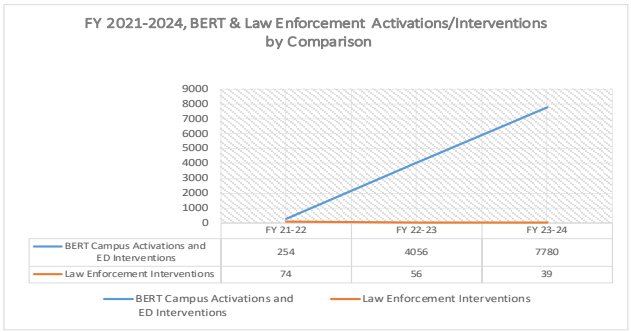


Seventy-nine percent of use-of-force was against males and 49% were against patients ages 34-43.

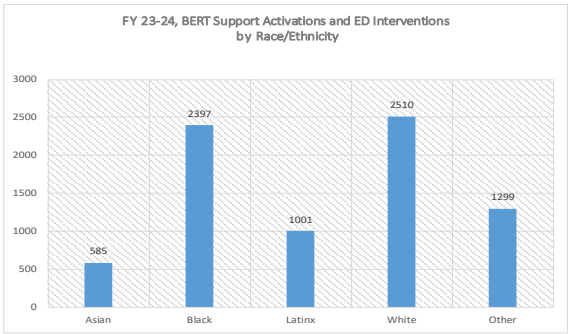


- Sixty-five percent of use-of-force was in response to reports of fighting.
- Thirty-seven percent of the acts reported to the Sheriff's Office were committed by Black/African Americans.

SECURITY EQUITY COUNTERMEASURES



- In FY 23-24, BERT interventions increased from the previous year by 92% (from 4,056 to 7,780 interventions) and was 7,741 more interventions than SFSO.
- An average of 87% of BERT interventions were accomplished without law enforcement being present.
- BERT campus-wide rounding consultations increased 7.3% (from 2799 to 3005 consultations).
- The Emergency Department 24-hour BERT program accounted for 2,961 (71%) of proactive BERT interventions and 89% were without law enforcement assistance.

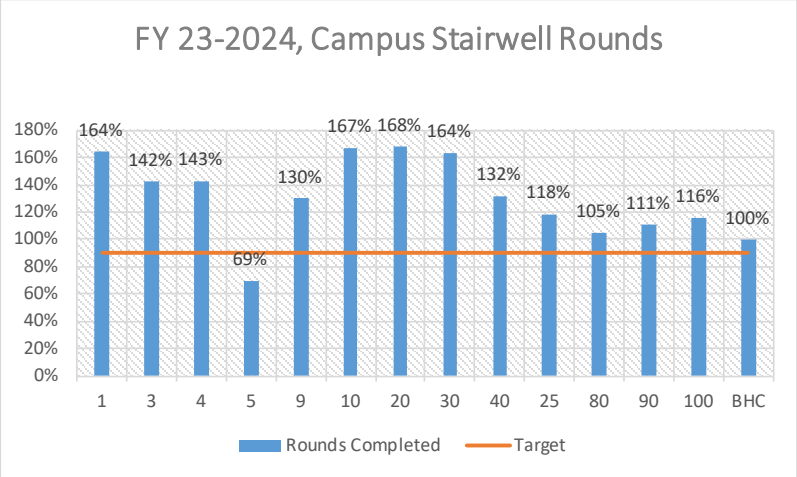


- Emergency Department BERT support to prevent escalating behavior, by race/ethnicity, was nearly equal between Black/African American and Caucasian patients (31%, 2,297 for Black/African American patients and 32%, 2,510 for Caucasian patients).

Campus Tunnel and Stairwell Rounding

Standard:

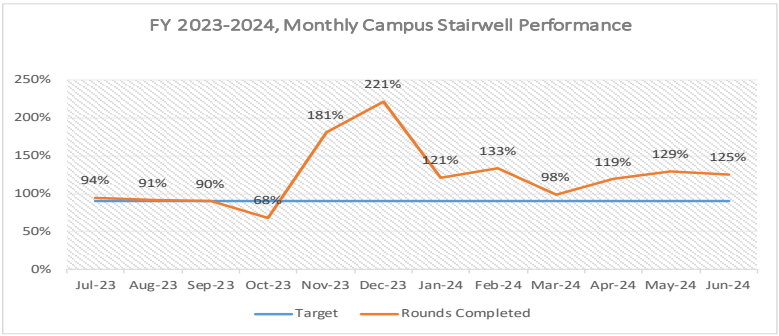
To demonstrate the effectiveness of the crime prevention through frequent patrols of campus tunnels and stairwells, there were 7,623 rounds conducted in 2023-2024.



**Numbers are based on supporting documentation provided by SFSO.*

Stairwell Rounding Analysis

- Through FY 23-24, an overall 93% of the campus building stairwells were patrolled. Patrols in one building (Building 5) did not meet the patrol target of 90%.
- Based on SFSO Stairwell Reports, the primary driver for the lack of patrols were staffing shortages.



Other Campus and Tunnel Rounding Activity:

- After FY 23-24, Q1, building stairwell patrols increased 64%.
- There was no tunnel related activity.

VII. UTILITY SYSTEMS MANAGEMENT

SCOPE

The Zuckerberg San Francisco General Hospital Facility Services Department implements and maintains the Utility Management chapter of the Environment of Care. The Utility Management Program ensures the operational reliability and assesses the special risks and responses to failures of the utility systems which support the facility's patient care environment. The major utility systems include but are not limited to electrical distribution, domestic water and wastewater systems, vertical transportation, communication systems, HVAC, and medical gases.

ACCOMPLISHMENTS

- Installed a temporary cooling tower to support the chiller replacement project in Bldg 2.
- Supported Bldg 5 projects including, Seismic upgrade, Dialysis center, Public Health Lab, and Psych Emergency for move to newly renovated space, Electrical distribution upgrade, and Fire Alarm system upgrade as part of ongoing projects work.
- Final repairs performed on ATS (Automatic Transfer Switch) QB1A serving Building 25.
- Emergency Response and repair to burst 4" domestic water line in front of Building.
- Implemented a robust maintenance and monitoring plan for domestic cold water for all buildings on campus.
- Built a maintenance plan for roof maintenance going forward campus w

PROGRAM OBJECTIVES FOR FY 2023-2024

Objectives	Met / Not Met	Comments and Action Plans
The hospital maintains a written inventory of all operating components of utility systems or maintains a written inventory of selected operating components of utility systems based on risks for infection, occupant needs, and systems critical to patient care (including all life support systems).	**Met**	Inventory of equipment for major utility systems maintained in equipment database.

The hospital identifies, in writing, inspection and maintenance activities for all operating components of HVAC systems on the inventory.	**Met**	Documentation of activities is entered into the automated work order system (TMS).
The hospital labels utility system controls to facilitate partial or complete emergency shutdowns.	**Met**	Utility isolation information located at the Engineering Watch Desk.
The hospital inspects, tests, and maintains emergency power systems as per latest edition of NFPA 110, Standard for Emergency & Standby Power Systems.	**Met**	Testing and inspection per NFPA 110.
The hospital inspects, tests, and maintains critical components of piped medical gas systems, including master signal panels, area alarms, automatic pressure switches, shutoff valves, flexible connectors, and outlets. These activities are documented.	**Met**	The medical gas system is certified annually. Area alarm panels are checked monthly. Documentation is provided by separate report.
Annual evaluations are conducted of the scope, and objectives of this plan, the effectiveness of the programs defined, and the performance monitors.	**Met**	Scope and objectives derived from quarterly report data.

Report Indicator	**FY 2022-2023 Totals**						
Systems	**5**	**25**	**BHC**	**80**	**90**	**100**	**SB**
Emergency Power Failures	0	0	0	0	0	0	0
Commercial Power Failures	0	0	0	0	0	0	0
Water System Failures							
Domestic	1	1	0	0	0	0	0
Waste	0	0	0	0	0	1	0
Communication Failures	0	0	0	0	0	0	0
HVAC Failures	1	0	0	0	0	0	0
Med Gas Failures	0	0	0	0	0	0	0
Elevator Failures	21	7	1	0	1	3	0
High Voltage Electric Switchgear	0	1	0	0	0	0	0

The Environment of Care Committee has evaluated the objectives and determined that they have been met. The Program continues to actively direct utilities management awareness.

PERFORMANCE METRICS

AIM: For FY 2023-2024, there was an uptick in elevator failures on Campus. Target was not met. 28 elevator outages in FY 2022-2023 vs 33 for 2023-2024.

FY 2021-2022: 22 elevator outages

FY 2022-2023: 28 elevator outages

FY 2023-2024: 33 elevator outages

Elevator Failures

Elevator Failures	1st	2nd	3rd	4th	Action
Elevator outages of 4-hours plus in duration, or passenger entrapment of any duration, (22 total cars)	5	6	9	13	Monitor for trends

AIM: For FY 2024-25 continue to manage and monitor outage trends with an overall goal to manage overall elevator outages. Note: the most common cause of elevator outage was damaged doors to the Bldg 5 cargo elevators (19 & 20). These elevator car doors are often hit by material moved in and out of the elevator (4 of 22 outages).

EFFECTIVENESS

The Utility Management Program is considered effective.

Proposed Performance Metrics for 2024-2025	Target	Comments and Action Plan
AIM: manage elevator failures at ZSFG to a minimum through contract unification	**Reduce outages from 2023-2024 level.**	Manage and monitor elevator outage trends.
AIM: Engage staff and contractors	**ZSFG staff**	Involve stake holders in project

to review & implement the 2016 bond measure projects pertaining to the utility system.	**engaged in all project work.**	implementation.

GOALS AND OPPORTUNITIES FOR IMPROVEMENT IN 2024-25

- Support the chiller and cooling tower replacement projects in Bldg 2.
- Support Security projects in Bldg 2.
- Support the main switchgear, and electrical distribution replacement projects in Bldg 5.
- Support IT infrastructure project in Bldg 5.
- Develop a building maintenance plan for assets that have been deferred and long overdue for replacement