

**Infection Prevention and Control Annual Plan
Zuckerberg San Francisco General Hospital & Trauma Center
Fiscal Year: July 1, 2019 thru June 30, 2020**

VISION

To be the best hospital by exceeding patient expectations and advancing community wellness in a patient-centered, healing environment that maintains the highest standards in infection prevention and control.

MISSION

To provide safe, quality healthcare and trauma services with compassion and respect while protecting patients from healthcare-associated infections (HAI).

PHILOSOPHY

The Infection Prevention and Control Department supports all the ZSFG True North Goals with a focus on Equity, Quality and Safety for patients, visitors, and staff. We believe that providing first class health care to our patients requires a program founded on evidence-based measures to prevent HAI. Protecting healthcare workers is also paramount, and we believe in reducing the risk of infectious occupational exposures and hazards for all personnel at Zuckerberg San Francisco General Hospital & Trauma Center (ZSFG). A key way to protect patients, visitors, and staff is through education to increase understanding of basic infection prevention measures and ways for healthcare workers to incorporate those same measures into their daily behaviors and decisions.

RISK ASSESSMENT

Universal Healthcare-Associated Infection Risks

As with any healthcare facility caring for acute and skilled-nursing patients, patients at ZSFG are at risk for a number of healthcare-associated infections (HAI), which may be related to devices and procedures. ZSFG is a California hospital and academic center and, as such, participates in a number of initiatives as outlined by various accrediting bodies (e.g. The Joint Commission), legislation (e.g. Senate Bill 158, 739, 1058), and organizations promoting patient safety (including IHI, BEACON, CHART, and SCIP). Given the important risks to patients pertaining to common and/or morbid HAI, ZSFG has evaluation and mitigation programs planned for selected HAI and prevention practices, please refer to Attachment 1 for complete listing.

ZSFG Microbiological Risk

While the prevalence of *Clostridium difficile* in our institution showed stabilization during 2015 - 2016, due to the on-going concern and national and international attention on increased virulence, *C. difficile* remains a focus of sentinel organism surveillance, ongoing staff education, and assessment for healthcare-associated transmission. In addition, ZSFG is participating in a California Emerging Infections Program (CEIP) project to review potential and identify existing risk factors.

Due to the increasing prevalence of extended spectrum beta-lactamase producing Gram negative organisms, especially *E. coli*, at our institution and nationwide, this organism is a focus of sentinel organism surveillance. In addition, the presence of Carbapenem-resistant Enterobacteriaceae, while extremely rare in our patient population, has been increasing nationwide and screening protocols have been implemented to actively monitor for this class of organism. Actions taken when any of these organisms are identified in a patient include placement of patient in contact isolation and assessment for healthcare-associated transmission.

Due to the presence of two multidrug resistance organisms in our institution, *Acinetobacter baumannii* and *Pseudomonas aeruginosa*, these organisms have become part of our sentinel organism surveillance. Actions taken

when the organism are identified in a patient include assessment of microbiology sensitivity pattern, initiation of contact isolation when results warrant, and assessment for healthcare-associated transmission.

Given our status as a trauma center and urban county hospital, staphylococcal infections are common and often serious. Most of these infections are community-associated but given the importance of this pathogen MRSA is a particular focus as a sentinel organism and as a target of prospective surveillance.

ZSFG Trauma and Critical Care Risk

As the only trauma center in San Francisco and the provider of Level 1 trauma care for a large population, several infection control concerns are particularly pertinent in our surgical intensive care unit (Building 25, H34/H36). These include possible ventilator-associated pneumonia, for which trauma patients are at higher risk, and neurosurgical infections status post traumatic brain injury. Surveillance for these infections is ongoing with interventions made as needed.

ZSFG and Construction Risk

As part of the seismic safety requirements and due to age of existing campus buildings, ZSFG is undergoing renovation of Building 5, the old acute care hospital, which now houses five inpatient units plus a variety of outpatient services, to include two ambulatory surgery units. Multiple units within Building 5 will undergo renovation to accommodate relocation of various outpatient clinics from older, seismically unsound structures while continuing with on-going required ADA renovation activities. With any major construction activity the potential for release of pathogenic organisms from soil and/or water sources exists. The Infection Prevention & Control Department is an active participant in developing mitigation plans to decrease the risk of exposure to our patients, staff and visitors. On-going monitoring through environmental and routine patient surveillance activities is done and adjustments to mitigation plans are made as needed.

ZSFG and Financial Risk

As a part of the San Francisco City and County Department of Public Health, ZSFG relies on the City and County budget as its primary source of operating costs plus the payments received through participation in various state and federal funding sources. There is a projected total year-over-year reduction of \$22.2 million between FY 2019-20 and FY 2020-21. This drop is a result of two primary factors: 1) the expiration of the Medi-Cal waiver Public Hospital Redesign and Incentives in Medi-Cal (PRIME) at the end of 2020; and 2) the scheduled federal reductions to Disproportionate Share Hospital (DSH) funding (which is currently allocated under the Global Payment Program) in the same year. Together, these reductions represent a potential loss of up to \$59. 5 million in net payments to DPH. Given the upcoming end to these programs, the in FY 2020-21 budget assumes that ZSFG will suffer a loss of fifty percent of these at-risk revenues (\$29. 7 million), but will retain the remaining fifty percent in a future funding model. This budgeted reduction of \$29. 7 million is partially offset by projected increases in other operating revenues, for a total year-over-year reduction of \$22.2 million between FY 2019-20 and FY 2020-21. Reimbursement data from 2018 – 2019 showed the following sources for payment of services:

Inpatient Days	Outpatient Encounters	
Un-insured:	1%	10%
Commercial:	5%	2%
Medicare:	35%	23%
Medi-Cal:	57%	55%
Other:	3%	11%

SCOPE OF PROGRAM:

The Infection Prevention and Control (IC) Department serves healthcare personnel, patients, and visitors in various ways; roles played by members of the Department include epidemiologist, consultant, educator, and investigator. A complete description of services provided may be found in the ZSFG IC Manual, Section 1; *Infection Control Program*. The IC department interfaces with members of various inspecting agencies, including The Joint Commission (TJC) and California Department of Public Health (CDPH).

The goals in this document are grouped and presented by type of activity. The prioritization of all activities is shown in the IC Risk Assessment Prioritization List which was developed using input from the following sources: ICC membership, ZSFG scope of services and 2018 calendar year plus 2018/2019 fiscal year data, emerging infectious issues, and information from the areas listed below (complete details available in ZSFG Administrative Policy 8.09 *Hospital Plan for Provision of Patient Care*). While all activities are recognized as important, the IC department will prioritize specific interventional activities based on this risk assessment.

Scope of Services:

ZSFG is a public health hospital licensed for a total of 393 beds: 284 acute beds, 30 Skilled Nursing beds, and 79 mental health beds. In addition, it is licensed by the California Department of Social Services Community Care Licensing Division for 41 beds. ZSFG scope also includes serving as the designated quarantine hospital and only Level 1 trauma center for the city and county of San Francisco and northern San Mateo County (approximately 1.5 million people).

Personnel:

The hospital employs 4,507 people that equates to 3,100 full-time employees who fall under two employers: ZSFG/City and County of San Francisco (CCSF) and University of California San Francisco faculty and staff that also includes 900 house staff that rotate throughout the year. ZSFG is affiliated with the University of California San Francisco (UCSF) for contracted services (e.g., Clinical Laboratories, Biomedical Engineering, Respiratory Therapy, Chronic Dialysis, Infection Control and Prevention), and UCSF also provides teaching and research. Through its affiliation with the UCSF School of Medicine, ZSFG has over 556 active and over 535 courtesy members of the Medical Staff. Each year, 400 third or fourth year medical students, 900 residents and 60 clinical fellows are trained at ZSFG.

In addition, ZSFG provides approximately 200 clinical nursing placements at the Associate, Baccalaureate and Masters levels for students from UCSF, the California State University System, local community colleges, and Bay Area private universities and colleges each year.

Population served:

ZSFG is part of the Community Health Network and serves as the primary community hospital for ~106,000 residents living in the southeast and northeast sections of the City. ZSFG's patient population continues to have a highly diverse ethnic composition: Latinos/Latinas – 38%; Asian/Pacific Islanders – 22%; Caucasians – 19%; African Americans – 15%; Native American – 1% and others/unknown – 5%. Our patients' age distribution ranges from newborn to geriatric with the largest percentage falling between the ages of 25 – 64 years (63%).

Top five infectious organisms/classes of organisms of concern for SF General Hospital:

- *Clostridium difficile*
- Influenza
- Tuberculosis
- Multi-Drug Resistant (MDR) Organisms, e.g. Extended spectrum β -lactamase producing *Escherichia coli*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa* and Carbapenem-resistant Enterobacteriaceae.
- *Staphylococcus aureus* (Methicillin Resistant [BSI: CMS Star Measure] and Sensitive)

Geographical Location and potential impact:

San Francisco serves as a port city which increases the risk of being an entry point for certain infectious diseases (e.g. MDR Tuberculosis (TB), Ebola Virus Disease (EVD), MERS-CoV, or Pandemic Influenza). Other potential problems include earthquakes and their associated risks (e.g. traumatic injuries, loss of potable water and functional sewer system leading to the potential increased risk of fecal-oral spread diseases).

A. GOALS AND OBJECTIVES:

1. Facilitate a coordinated process to prevent healthcare associated infections (HAI) in patients and health care workers in accordance with current California Occupational Safety and Health Administration (CAL-OSHA) regulations, SF Department of Public Health (SFDPH), California Department of Public Health (CDPH), CDC

guidelines and Joint Commission standards through education of staff, patients, and visitors on appropriate infection prevention practices utilizing various types of media and format. (On-going)

- a. Infection Control personnel will provide education on Infection Control, Tuberculosis Prevention and Control Plan, Bloodborne Pathogen Exposure Control Plan, Standard Precautions (SP), and ZSFG isolation categories on a monthly basis through scheduled New Employee Orientation. Educational material will be updated as needed based upon changes to standards and new information. (Measures of Success (MOS) for education will be maintained by Department of Education & Training (DET))(On-going)
 - b. Annual education will be accomplished via on-line learning modules, divisional/department annual updates and videotapes in combination with unit IC liaison briefings. (MOS for education will be maintained by DET)
 - c. Develop briefings on selected sentinel organisms such as methicillin-resistant *Staphylococcus aureus* (MRSA) and *C. difficile* as needed. These briefings may be presented through the ZSFG on-line learning portal, at staff meetings or other venues by Infection Control personnel or unit liaisons. Posters, signs, and pamphlets (if funds are available) may be used in staff and patient education. (MOS for education will be maintained by DET or individual units based on process used.)
 - d. Implement National Health Safety Network (NHSN) program activities as required by CDPH.
2. Decrease the known HAI Rates from FY 2018/19. ZSFG has set target goals for each targeted HAI while it is agreed that the ultimate goal should be to always strive for 0 preventable HAI. (Refer to Section B; **Performance Measures** below for HAI specific goal and complete details of surveillance studies.) (On-going)
- a. Collaborate with Quality Management (QM) and clinical personnel in the implementation of performance improvement activities by assisting with educational programs on facility specific HAI and policy development, at facility-wide and unit-specific levels, to prevent/reduce their occurrence utilizing appropriate professional organization standards and/or performance measures for target audience (e.g. Surgical Site Infection (SSI) Reduction, Ventilator Associated Events (VAE), Central Line Associated-Blood Stream Infection (CLA-BSI), and Catheter Associated-Urinary Tract Infections (CA-UTI) bundles).
 - b. Collaborate with appropriate specific HAI reduction task forces on developing processes to promote decreased utilization of invasive devices (central lines, indwelling urethral catheters, ventilators) as soon as clinically appropriate using educational efforts, electronic medical record prompts and encouragement/implementation of device utilization discussion in interdisciplinary patient rounds. IC personnel will provide NHSN device utilization rates for external comparison and ZSFG unit-specific device utilization rates for internal comparison. Reduction goals to be established by appropriate task forces.
 - c. Collaborate with inpatient and outpatient dialysis units to decrease known dialysis associated infection rates from FY2018/19. ZSFG participates in the NHSN outpatient dialysis infection tracking program plus all positive culture reports are received through daily microbiology surveillance reports and the inpatient unit is part of the ZSFG HAI surveillance program. In addition, the IC department participates in the monthly dialysis Quality Assurance/Performance Improvement meetings.
3. Provide a safe, healthy environment for all personnel, patients, and visitors through the following measures:
- a. Ensure the facility provides the appropriate means to prevent possible transmission of infectious illness through blood exposures of all types in accordance with the CAL-OSHA Bloodborne Pathogens Standard. (On-going)
 - 1) Provide education on the Bloodborne Pathogen Exposure Control Plan and the staff members' responsibilities in complying with this directive. Components include prompt reporting of exposures, and adherence to Standard Precautions. The topics are reflected in the ZSFG Infection Prevention & Control Manual and in initial/annual employee education.
 - 2) Participate in the Safety Device Committee in the evaluation and purchasing (if necessary) of improved needle safety devices (e.g. sharps disposal containers, safety needles/syringes, safety lancets, plastic capillary tubes, etc.) and other exposure prevention devices (e.g.. personal protective equipment)(On-going)
 - b. Ensure the facility provides the appropriate level of equipment cleaning/disinfection to prevent transmission of infectious organisms through shared fomites (indirect contact)

- 1) Perform annual survey across the facility to identify locations where procedures are performed utilizing re-usable devices/instruments, to include point of care ultrasound procedures.
 - 2) Collaborate with Biomedical Engineering department to ensure new equipment has been reviewed for appropriate cleaning/disinfecting processes.
 - 3) Collaborate with clinical and support service personnel to ensure education on proper cleaning/disinfecting processes and that instructions are present in the area of use.
 - c. Ensure the facility provides appropriate means to prevent possible transmission of infectious illness through respiratory exposures, to include but not limited to Tuberculosis (TB), meningococcal disease and influenza.
 - 1) Implement year-round respiratory hygiene measures as recommended by CDC to decrease the potential spread of undiagnosed illness.
 - 2) Perform annual TB risk assessment according to the CDC's *Guidelines for Preventing the Transmission of Mycobacterium TB in Health-care Settings*, 2005. Based upon the risk assessment, determine number and location of employees that require TST monitoring in partnership with Employee Health Services of ZSFG and UCSF. (MOS will be maintained by Employee Health Services)
 - 3) Provide influenza immunizations at no cost to all ZSFG campus personnel, to include employees, faculty, contractors, students and volunteers.
 - d. Ensure Food and Nutritional Services uses appropriate practices to prevent transmission of foodborne illness through:
 - 1) Proper food handling practices through all stages of preparation to include thawing, preparation, serving, cool down, and storage in accordance to Food Safety Code.
 - 2) Proper cleaning and sanitation of food preparation surfaces, kitchen surfaces and equipment, food storage areas and environmental surfaces in accordance with Food Safety Code and equipment manufacturers' instructions.
 - e. Ensure the facility provides the appropriate level of environmental activities to prevent transmission of infectious organisms through direct and indirect contact. (Refer to Section B.4.a and C.2 for MOS)
 - 1) Construction/Renovation Activities: In order to protect individuals within the hospital from potential exposure to harmful organisms and/or substances during any disruption to the structure, an Infection Control Risk Assessment (ICRA) will be accomplished by qualified personnel (number and type determined by scope of project). Facilities Management from ZSFG and/or UCSF will notify IC personnel of activities during the planning phase and an initial ICRA will be performed.
 - a. The ICRA will be used to determine what level of protective barriers need to be implemented prior to project start and what type of surveillance activities need to be performed in accordance with ZSFG IC Manual Policy 7.09; *Renovation and Construction Guidelines*.
 - b. The ICRA will be updated as needed based upon findings during routine surveillance or changes in project plan.
 - c. The results of the ICRA(s) will be reported to the ICC and EOC upon completion.
 - d. See **Section B.3.c.** of this plan for surveillance frequency and reporting.
 - 2) Environment of Care (EOC) Rounds: IC representatives will participate in the EOC rounds under the coordination of the ZSFG Safety Officer.
4. Promote community health and safety by facilitating communication between ZSFG clinical staff, CDPH and SFDPH Communicable Disease Control and Prevention division. The following items will be reported in accordance with state and local regulations:
- a. Diseases as required by SFDPH, list of diseases and timeframe found on the Confidential Morbidity Report Form located at <https://www.sfcdep.org/wp-content/uploads/2018/01/Reportable-Diseases-List-CMR-SFDPH-UPDATED-07.01.2019.pdf> and ZSFG IC Manual, Policy No. 1.08; *DHS Reportable Diseases*.
 - b. Severe *Staphylococcus aureus* infection in a previously healthy person; reportable to SFDPH for forwarding to CDPH.
 - c. HAI as required by CDPH; currently Vancomycin Resistant Enterococcus and MRSA blood stream infections (BSI), *Clostridium difficile* illness, Central Line Associated BSI, Surgical Site Infections (Deep Incisional and Organ/Space) for the 29 procedures identified to be at increased risk for these infections go to: <https://www.cdph.ca.gov/Programs/CHCQ/LCP/Pages/AFL-11-23-Attachment.aspx>

- d. Diseases as required by CDPH, list of diseases and timeframe found at: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Reportable-Disease-and-Conditions.aspx>).
 - e. “Outbreak” Management: Outbreaks may occur in our facility or in the community; depending on the circumstances, there may be an associated increase in the number of patients who need treatment.
 - 1) For community-based outbreaks the IC Department will work in accordance with SFDPH guidelines.
 - 2) For a facility-based outbreak, the steps recommended in ZSFG IC Manual, Policy 1.09; *Outbreak Investigations* will be followed, and, based upon the type and projected number of possible patients, notification will be made to Emergency Management Coordinator for potential activation of the ZSFG Emergency Response Plan: Section 11; *Hazard Specific Plan – Disease Outbreak*
 - 3) Actions will be documented and reported to the ICC (and other committees as appropriate) for evaluation of effectiveness of actions and potential areas for improvement.
5. Perform Documentation Reviews in order to ensure that ZSFG personnel are provided with the current practices on prevention and control of HAI and other infectious diseases. (On-going)
- a. Involve ICC and unit liaisons, where appropriate, in the review process of ZSFG Infection Control Manual; ZSFG IC Manual policies are reviewed and revised bi-annually with the exception of the Bloodborne Pathogen and TB Exposure Control Plans which require annual review.
 - b. Conduct policy reviews to ensure that healthcare personnel are provided with current information to protect themselves, patients, and visitors.

B. PERFORMANCE MEASURES:

1. **Outcome Surveillance Studies:** All standardized criteria, formulas used for Standardized Infection Ratios (SIR), rate calculations, and data collection forms/tools are downloaded from the Centers for Disease Control and Prevention’s National Healthcare Safety Network (NHSN) and maintained in the computer-based surveillance folder at EPI-Center ([\\sfgh02.som.ucsf.edu\Shared\\$\vol02](\\sfgh02.som.ucsf.edu\Shared$\vol02)) (J.) > Common > _New > _Surveillance > NHSN.
 - a. ***Clostridium difficile* Overall Incidence Rate** (NPSG.07.03.01; CA SB 1058) further information provided in Section 4; *Sentinel Organisms*) (*Supports Sections A.1- 3*):
 - 1) **What:** Monitor incidence rate of *Clostridium difficile*
 - 2) **Who:** All in-patients
 - 3) **Length of time:** Continuously (1 Jan – 31 Dec)
 - 4) **Method:** Sentinel organism monitoring based on microbiology laboratory reporting (until legacy reports no longer available) and Epic foundation report.
 - 5) **Stratification:** By location
 - 6) **Threshold:** 1 per 1,000 patient days
 - 7) **Goal:** While the ultimate goal is to have 0 cases, our achievable goal is to decrease 2014 rate by 25% (0.72 per 1,000 patient days) through use of contact isolation, proper environmental cleaning by nursing and EVS personnel, and antibiotic utilization review by the end of FY 2019-2020.
 - 8) **Reporting/Feedback:** Rates will be reported monthly to ICC/MEC and quarterly to ICC/MEC/NAF and CDPH. In addition, if cluster detected it will be reported immediately to affected unit for intervention.
 - 9) **Personnel:** IC Department, Nursing, Medical Staff
 - b. ***Clostridium difficile* Hospital-Onset Incidence Rate** (CMS Star Measure; ZSFG True North Metric; IC Department A3) (*Supports Sections A.1- 3*):
 - 1) **What:** Monitor incidence rate of hospital-onset *Clostridium difficile*
 - 2) **Who:** All in-patients
 - 3) **Length of time:** Continuously by FY (1 Jul – 30 Jun)
 - 4) **Method:** Sentinel organism monitoring based on microbiology laboratory reporting (until legacy reports no longer available) and Epic foundation report.
 - 5) **Stratification:** By location

- 6) **Goal:** While the ultimate goal is to have 0 cases, our achievable goal is to decrease FY 2014/2015 rate (0.68 per 1,000 patient days) by 50% (0.34 per 1,000 patient days) by FY 2019/2020 through use of contact isolation, proper environmental cleaning by nursing and EVS personnel, and antibiotic utilization review.
 - a. US Dept of Health & Human Services goal: SIR = 0.70 will be used as we change from rates to SIR comparisons.
- 7) **Reporting/Feedback:** SIR will be reported quarterly to ICC/MEC/PIPS/NAF and CDPH. In addition, if a cluster is detected it will be reported immediately to affected unit for intervention.
- 8) **Personnel:** IC Department, Nursing, Medical Staff

c. **CLA BSI** (NPSG.07.04.01; CA SB 739; CMS 1533; CMS Star Measure) (*Supports Section A.2*)

- 1) **What:** Monitor for development of CLA-BSI during hospitalization
- 2) **Who:** Patients with Central Lines. Information shall be used to identify patterns/trends to guide interventions for prevention of further BSI.
- 3) **Areas:** All in-patient units
- 4) **Length of Time:** Continuously (1 Jul – 30 Jun)
- 5) **Method:** Epic Foundation reporting process and verification by IC staff.
- 6) **Stratification:** By location and by catheter site, i.e. Subclavian, Femoral, Internal Jugular or Peripherally Inserted Central Catheter (PICC).
- 7) **Threshold:** As NHSN no longer calculates a rate, ZSFG rates are shown for comparison purposes and will not be used to set thresholds. For FY 2020 the US Dept of Health & Human Services (HHS) target will be used as our goal. **California Standardized Infection Ratio of 0.944** (calculated by Number of Observed / Number of Predicted based on NHSN’s 2015 baseline national data) is used as threshold.
- 8) **Goal:** While the ultimate goal is to have 0 CLABSI, the ZSFG overall goal is to decrease the previous FY rate of CLA-BSI by 25% at a minimum for each individual category. In addition, where the current SIR is higher than HHS the goal will be to reduce to equal; for area with SIR lower than HHS it will be to maintain as SIR changes each year based on national performance.

	2018/2019 Rates	2019/2020 Goals:	SIR Goal:
Hospital-wide rate =	1.06	0.80	0.635
Combined ICU rate =	0.86	0.64	0.50
Non-ICU rate =	0.42	0.32	0.40

- 9) **Reporting/Feedback:** Rates will be reported quarterly to the Critical Care Committee/ICC/NQICC/PIPS/MEC and CDPH.
- 10) **Personnel:** IC Department

d. **Infection Related Ventilator-Associated Condition (IVAC)/Ventilator Associated Pneumonia (VAP)** (IHI Initiative) (*Supports Section A.2*)

- 1) **What:** Monitor for development of IVAC and possible VAP during hospitalization
- 2) **Who:** All mechanically ventilated patients
- 3) **Areas:** H32/38 and H34/36
- 4) **Length of Time:** Continuously (1 Jul – 30 Jun)
- 5) **Method:** Epic Foundation reporting process and verification by IC staff.
- 6) **Stratification:** By location
- 7) **Threshold:** As there is no NHSN defined rate available for exact comparison of VAP published, and as the VAP criteria now include specific specimen source not routinely collected, ZSFG surveillance will be to Possible VAP (PVAP).
- 8) **Goal:** In accordance with VAP Task Force; decrease rate by **25% overall**.

	2018/2019 rates	2019/2020 goals:
Combined ICU rate =	1.83	1.36
H34/36: Trauma/Medical-Surgical =	2.18	1.64
H32/38: Coronary/Medical =	1.30	0.98

- 9) **Reporting/Feedback:** Rates will be formally reported quarterly to the Critical Care Committee/ICC/PIPS/MEC and annually to NQF.
- 10) **Personnel:** IC Department

e. Surgical Site Infection (SSI) (NPSG.07.05.01; ZSFG True North Metric; CMS Star Measure) (*Supports Section A.2*):

- 1) **What:** Monitor for development of SSI in clean or clean-contaminated surgical procedures that have an increased risk of developing complex AR infections as defined by CDPH (see attachment 2) with emphasis on targeted procedures: Colon and Abdominal Hysterectomies
- 2) **Who:** Patients undergoing above defined procedures.
- 3) **Length of Time:** Continuously (1 Jul – 30 Jun)
- 4) **Method:** Epic Foundation reporting process and verification by IC staff. For any cases where additional review is required Surgical Service representatives will be consulted to determine if patient meets NHSN criteria for SSI – Superficial Incisional and Deep Incisional, Primary (DIP) and Secondary (SIP) sites and Organ/Space (O/S).
- 5) **Stratification: Initial:** By Procedure; **Secondary:** By Scheduled, Emergent, Trauma
- 6) **Threshold:** For all surgical procedures the FY 2018/2019 NHSN aggregate surgical SIR and California SIR 0.96 for Colon and 0.85 for Total Abdominal Hysterectomies (TAH).
- 7) **Goal:** Decrease all three Standardized Infection Ratios (SIR) to less than 1.

Aggregate SIR =	0.906
Colon SIR =	1.261
TAH SIR =	0
- 8) **Reporting/Feedback:** Colon and Abdominal Hysterectomies monthly to OR committee and appropriate service leads; quarterly report of all identified SSI to the following committees; OR/IC/MEC; feedback to individual surgeons and departments as needed. Quarterly to CDPH through NHSN system: Class I and II procedures with complex AR infections.
- 9) **Definition of terms:** complex = Deep Incisional, Primary (DIP) and Organ/Space (O/S)
AR = Admission / Re-Admission
- 10) **Personnel:** IC Department / OR – Nurse Manager; PeriOperative PI Coordinator / Surgical Services Representatives

f. CA UTI (NPSG.07.06.01; CA SB 739; CMS 1533; CMS Star Measure) (*Supports Section A.2*):

- 1) **What:** Monitor for development of CA UTI during hospitalization
- 2) **Who:** Patients with indwelling foley catheters. Information shall be used to identify patterns/trends to guide interventions for prevention of further UTI.
- 3) **Areas:** All in-patient units
- 4) **Length of Time:** Continuously (1 Jul – 30 Jun)
- 11) **Method:** Epic Foundation reporting process and verification by IC staff.
- 5) **Stratification:** By location
- 6) **Threshold:** As NHSN no longer calculates a rate, ZSFG rates are shown for comparison purposes and will not be used to set thresholds. **California Standardized Infection Ratio of 0.944** (calculated by Number of Observed / Number of Predicted based on NHSN’s 2015 baseline national data) is used as threshold.
- 7) **Goal:** While the ultimate goal is to have 0 CAUTI, the ZSFG overall goal is to decrease the previous FY rate and SIR for CAUTI by 25% at a minimum for each individual category.

	2018/2019 Rates	2019/2020 Goals:	SIR Goal:
Hospital-wide rate =	1.26	0.89	0.51
Combined ICU rate =	1.76	1.32	0.76
Non-ICU rate =	0.59	0.44	0.31

- 8) **Reporting/Feedback:** Rates will be formally reported quarterly to the Critical Care Committee/ICC/NQF/PIPS/MEC.
- 9) **Personnel:** IC Department

g. 4A Skilled Nursing Facility Surveillance: (NPSG Goal 7) (*Supports Section A.2 and CA Licensing*)

- 1) **What:** Monitor for the development of new HAI or infectious disease while in SNF
- 2) **Who:** Residents of 4A
- 3) **Length of Time:** Continuously

- 4) **Method:** Epic Foundation reporting process and verification by IC staff in consultation with 4A Nurse Manager. Verification of any HAI presence is done using SHEA/CDC definitions.
- 5) **Stratification:** For HAI: by type of infection; for other infectious diseases: case by case basis
- 6) **Threshold:** Per CDC NHSN 2012 Report: CL-BSI – 4A: 1.2 per 1000 central line days
CA-UTI – 4A: 0.52 per 1000 catheter days
Per APIC/SHEA Jul 2008: Pneumonia – 2.0 per 1000 resident days
(Range: 0.3 – 2.5 episodes per 1000 resident days)
- 7) **Reporting/Feedback:** 4A will report events monthly to IC staff and quarterly to the ICC. IC staff will provide immediate feedback whenever adverse trends are identified and assist with further investigation as necessary to identify and alleviate possible contributing factors.
- 8) **Personnel:** IC Department / Nurse Manager, 4A-SNF

h. Healthcare Associated Infection Review and Sentinel Event Reporting Process (*CA SB 158; Patient Safety and Infection Control & NPSG 7*)

1) **Healthcare Associated HAI Review:**

- a) **What:** Monitor for the development of HAI for inpatients.
- b) **Who:** Inpatients
- c) **Length of Time:** Continuously
- d) **Method:** Epic Foundation reporting process and verification by IC staff. In addition, legacy process will continue until data no longer available accessible from historic data systems: “New Antibiotic Order” report sent by IC daily for all patients who have been in the facility for greater than 48 hours; ID Pharmacist reviews patient list for documented reason for antibiotic against antibiotic order sheets and verifies new vs. change order and sends amended list to IC practitioners; IC practitioners review medical record of patients for clinical verification of healthcare associated infection using ZSFG approved criteria.
- e) **Stratification:** Type of infection and location of patient
- f) **Threshold:** N/A
- g) **Reporting/Feedback:** Results will be grouped using two criteria:
 - i. Type of infection: Blood stream infections (sub-set CLABSI); UTI (sub-set CAUTI); Pneumonia (sub-set VAP); Surgical Site Infection; Other – as identified (sub-sets EVD associated meningitis, Skin/Soft Tissue)
 - ii. HAI present/Patient Impact where 0 = No HAI; 1 = HAI present, no impact on patient stay; 2 = HAI present, affected patient stay (prolonged stay or increased level of care); 3 = HAI present, possible Sentinel Event.

Results reported as aggregate data with trend analysis for HAI in all categories to IC staff monthly; ICC/PIPS quarterly and Risk Management annually. Any category 3 HAI will be handled through the pre-existing Sentinel Event process after discussion at IC staff meeting. The information will be used to initiate performance improvement measures, if indicated.

- h) **Personnel:** IC Department
- 2) **Sentinel Event Review:** A member of IC department participates in root cause analyses (RCA) due to sentinel events that may have occurred as a result of a HAI.
- 3) **Morbidity Review:** Infection Control works in collaboration with departmental M&M functions in reviewing cases where HAI caused lasting morbidity, either through record review performed by IC practitioner or IC co-chair (Infectious Diseases physician) or meeting participation.
- 4) **Mortality Review:**
 - a) **What:** Monitor for deaths that may have occurred as a result of HAI.
 - b) **Who:** All in-patient deaths identified through mortality reports.
 - c) **Length of Time:** Continuously
 - d) **Method:** IC personnel review list of patients received monthly from Medical Records and performs record review on cases where cause of death may have HAI component; determination is made using established criteria and cases are assigned a code based upon strength of association.
 - e) **Reporting/Feedback:** A report is provided annually to ICC/MEC.
 - f) **Personnel:** IC Department

2. **Process Surveillance Strategies (CA SB 739 requirement)** are accomplished as a collaborative effort between IC and Quality Management (QM) personnel. QM personnel monitor for adherence to the IHI bundles for CLABSI/SCIP/VAP and in addition IC personnel perform the following:

a. **SP–Hand Hygiene - (NPSG.07.01.01; CA SB 158; IHI Bundle Component for Prevention of CLABSI and VAP)(Supports Section A.1 & 2):**

- 1) **What:** a) Staff clean hands as appropriate according to ZSFG IC Manual Policy 3.01; *Hand Hygiene*.
- 2) **Areas:** All areas that provide direct patient care.
- 3) **Length of Time:** On-going (1 Jul – 30 Jun).
- 4) **Method:** IC trained observers will perform visual surveillance using a standardized checklist. Each observer will document a minimum of 20 personnel in their unit each month. The personnel observed do NOT need to be assigned to their unit. IC staff will perform a minimum of 30 observations per month; areas surveilled will focused on those with low or no observations submitted by unit liaisons.
- 5) **Stratification:** By unit and profession
- 6) **Goal:** a: 95%
- 7) **Reporting/Feedback:** a) HH Compliance Rate will be reported to ICC/MEC/NAF and PIPS quarterly. Results will be used to determine upcoming year's annual plan for educational offerings and surveillance frequency. Areas scoring less than threshold will have survey frequency increased.
- 8) **Personnel:** IC Department / IC Unit Liaisons

b. **Central Line Insertion Practice (CLIP) Measures (NPSG.07.04.01; QIP IP-4):**

1) **Aseptic Technique:**

- a) **What:** Monitor for compliance to the following: proper hand hygiene, use of maximal barrier precautions upon insertion, use of chlorhexidine skin antisepsis unless contraindicated, and optimal catheter site selection with avoidance of the femoral vein for central venous access in adult patients, except for dialysis catheters; when ultrasound-guided technique is done then sterile probe cover and sterile gel are used.

$$N = \# \text{ of } 100\% \text{ CLIP compliant insertions} / D = \# \text{ of billed central line procedures.}$$

- b) **Areas:** All patient care areas where CVCs are inserted.
- c) **Length of Time:** Continuously (1 Jul – 30 Jun)
- d) **Method:** California-specific CLIP measures incorporated into the Epic Central Line Insertion procedure note. Multi-step process: 1) Epic CLIP report from foundation used to identify central line insertions; 2) IC staff manually transcribe custom fields for ultrasound, sterile gel/probe cover and inserter; and then 3) IC staff manually transcribe CLIP data for each central line from Epic to NHSN.
- e) **Stratification:** By location
- f) **Goal:** QIP set – 25% improvement from FY18/19 rate of 55.4% = 69.2%
- g) **Reporting/Feedback:** Rates will be reported quarterly to ICC/Critical Care/MEC/NQF/PIPS.
- h) **Personnel:** IC / QM Departments, Nursing and Medical Staff

c. **Influenza Immunization - (NPSG.07.01.01; CA SB 158)(Supports Section A.1 & 2):**

- 1) **What:** Monitor for compliance to influenza immunization requirement, either through receipt of immunization or signing of ZSFG declination statement.
- 2) **Who:** All ZSFG campus personnel, to include employees, faculty, contractors, students and volunteers.
- 3) **Length of Time:** Annually between October 1 – March 31
- 4) **Method:** OHS personnel will enter names of immunized personnel into EHS database and then calculate compliance via two methods:
 - a. $\frac{\# \text{ of personnel immunized}}{\# \text{ of personnel on campus}} \times 100 = \text{Immunization Compliance Rate}$
 - b. $\frac{\# \text{ of personnel with signed declination}}{\# \text{ of personnel on campus}} \times 100 = \text{Declination Rate}$
- 5) **Stratification:** By unit or department and job classification (as defined by NHSN).
- 6) **Goal:** a: 90% & b: < 7 %

- 7) **Reporting/Feedback:** a) Individual unit and department managers will receive overall immunization compliance rates and a list of non-compliant individuals monthly at a minimum, beginning November. b) Immunization Compliance Rate will be reported to ICC/MEC/NAF monthly during influenza season; PIPS annually. c) Immunization Compliance data will be submitted to NHSN annually at the end of the influenza season.
- 8) **Personnel:** Employee Health Services

- d. Antibiotic Usage (CA SB 739 requirement):** ZSFG's guidance and protocols for antibiotic usage are maintained in the ZSFG IC Manual located on the CHN intranet. They were developed in collaboration between the IC department, Pharmacy and Therapeutics – Antibiotic Usage sub-committee, and the Infectious Disease (ID) Pharmacist.

Historically the ID Pharmacist has monitored and evaluated antibiotic orders on a daily basis for appropriateness and makes recommendations as needed. With the adoption of Epic on Aug 3, 2019 the Epic foundation Antibiotic Utilization module will be utilized to assist with and report out on antibiotic usage.

- e. Food Safety Practice: Temperature Control (Supports Section A.3.c)**

- 1) **What:** IC rounds consists of assessment for proper temperature for food items during various stages of handling, to include cooking, serving, cool down, and storage.
- 2) **Areas:** F&NS sections: A la Carte line, Blast Chill Freezer, and Refrigerators
- 1) **Frequency:** Semi-Annual (scheduled on alternate quarters from EOC rounds)
- 3) **Method:**
Part 1: Observational: Infection Control designee will observe staff performing real-time temperature verification for random food items, in various stages of handling, to include cooking/re-heating, cooling down, serving, and storing/holding using a Food Services Checklist developed using the Food Safety Code temperature ranges and maintained on the computer-based surveillance folder at Epi-center\$ Sfgh03 (J)/Common/___New/___Surveillance. Discrepancies and the corrective actions taken (e.g. temperature adjustment on device in use and/or discarding of food items) will be documented and reported to F&NS management staff within 2 weeks. Discrepancies requiring action by another department or a recommended change in process will be documented and forwarded to the appropriate department for response.
Goal: 100% compliance.
- 4) **Reporting:** ICC
- 5) **Personnel:** IC Department; Food & Nutritional Services supervisory personnel

- f. MRSA Active Surveillance Testing: (CA SB 1058 - Health facilities: bacterial infections.)**

- 1) **What:** Monitor percentage of patients who test positive for MRSA via anterior nasal culture within 24 hours of admission in an effort to understand burden of disease in our population and monitor for facility acquisition.
- 2) **Who:** Five selected categories of patients
 - a. Discharge from an acute care facility w/ in the past 30 days
 - b. Admission to an ICU
 - c. Patient admitted with ESRD diagnosis (Epic not able to guarantee of capture of CDPH category for patients receiving hemodialysis at this time)
 - d. Transfer from a skilled nursing facility
 - e. Pre-op patient w/ documented medical condition making them susceptible to infection – deferred until clarification of qualifying medical conditions per CDPH (*pending – no published anticipated date of determination*)
- 3) **Area:** Hospital-wide
- 4) **Length of Time:** Continuously (1 Jul – 30 Jun)
- 5) **Method: New Epic Process** – Epic report (being built – not yet complete and validated); Microbiology will attempt to continue their MRSA Surveillance – Nasal report daily to IC data analyst to compare with Epic results for first 3 months after build completed to ensure stability of process and data.

- 6) **Stratification:** Per Unit
- 7) **Threshold/Goal:** N/A
- 8) **Reporting/Feedback:** Above rate will be reported quarterly to medical staff/ICC/PIPS/MEC.
- 9) **Personnel:** IC Department / Clinical Nursing Staff / Clinical Medical Staff / Microbiology personnel

3. Environmental Surveillance:

a. **Visual: On-going (scheduled through EH & S)** (*Supports Section A.3.d*):

- 1) **What:** Environment of Care (EOC) Rounds consist of assessment for proper care and maintenance of the facility, equipment, and supplies used in patient care.
- 2) **Areas:** All patient care and select non-patient care (e.g. Clinical Lab, Pharmacy) areas at ZSFG.
- 3) **Length of Time:** On-going
- 4) **Method:** An Infection Control Practitioner will visually survey each patient care area semi-annually and share results with the EOC/Safety Committee. The ICP will use a standardized checklist. Minor discrepancies will be addressed and corrected immediately. Discrepancies requiring action by another department or a recommended change in process will be identified in writing and suggestions will be offered to correct the item.
- 5) **Reporting:** Immediate feedback is provided to unit personnel; issues will be reported as needed to ICC.
- 6) **Personnel:** IC Department

b. **Food & Nutritional Services** – (*Supports Section A.3.c*)

- 1) **What:** IC Rounds consists of assessment for proper cleaning of food preparation and cooking surfaces during all stages of work and for proper care and maintenance of the facility, equipment, and supplies used in food preparation and storage areas.
- 2) **Why:** Environmental cleanliness is a key component of the Food Safety Code and a critical element for the prevention of foodborne illnesses.
- 3) **Areas:** All patient food preparation areas at ZSFG.
- 4) **Length of Time:** Monthly x 6 months; if results are satisfactory then every other month x 6 months
- 5) **Method:** Infection Control designee will visually survey the kitchen to include food preparation items (steam kettles, grill tops, ovens) and food storage areas such as refrigerators, for overall cleanliness using a Food Services Checklist developed using the Food Safety Code and equipment manufacturers' directions. Minor discrepancies will be addressed and corrected immediately. Discrepancies requiring action by another department or a recommended change in process will be documented and forwarded to the appropriate department for response.
- 6) **Reporting:** Immediate feedback is provided to Food & Nutritional Services personnel; issues will be reported as needed to appropriate supervisory personnel and ICC for corrective actions; routine reports will be provided to ICC and ALCC.
- 7) **Personnel:** IC Department; Food & Nutritional Services supervisory personnel

c. **Sterilizers** (*Supports Section A.3*): Daily spore tests conducted. Results documented and positive results are reported immediately to the IC department in accordance with ZSFG IC Manual Policy 6.10; *Biological Monitors with Positive Results/Sterilization Failure* and Sterile Processing Department Policy S8.0; *Sterilization and Equipment Recall from the Sterile Processing Department*. Quarterly reports given to the ICC.

d. **High Level Disinfection (HLD)** (*Supports Section A.3.b*):

- 1) **What:** Assess each area where HLD is performed to ensure appropriate processes are in place, to include maintenance of documentation log in accordance with policy.
- 2) **Why:** Appropriate level of equipment cleaning and disinfection is essential to prevent transmission of organisms between patients.
- 3) **Areas:** All locations where HLD is performed.
- 4) **Length of Time:** Based upon time of HLD process initiation:
 - a. **New Areas:** Monthly for 3 months, then semi-annually thereafter.
 - b. **Established Areas:** Semi-annually

5) **Method:** IC personnel will review documentation logs assessing for completeness; perform random observations of personnel performing HLD and verify competency assessments in place for all personnel who perform HLD.

e. **Construction/Renovation** (*TJC Requirement EC.8.30*) (*Supports Section A.3.d.*): Targeted; level and frequency determined based upon ICRA results. Refer to ZSFG IC Manual Policy 7.09 for further details. Each project will have an action plan developed by IC personnel and submitted to ICC for review. Compliance to plan will be reported quarterly to ICC and EOC.

4. **Sentinel Organisms** (*Supports Section A.1 & 2*): The following organisms were selected for routine surveillance reporting based upon nationally-identified concerns and/or ZSFG-specific concerns. The primary method for prevention of spread within the facility is adherence to Standard Precautions. Certain organisms will require additional isolation precautions as listed in ZSFG IC Manual. Measures taken for improvement in compliance in these areas will be applicable for all organisms and are monitored under **Process Surveillance 2.a: BSP – Hand Hygiene** and **3.a: Visual**.

- a. *Clostridium difficile*
- b. Gram-negative bacteria *Enterobacter* spp., *Acinetobacter* spp., *Pseudomonas aeruginosa*
- c. Extended Spectrum Beta-Lactamase producing organisms; e.g. *Escherichia coli* and *Klebsiella pneumoniae*
- d. Methicillin-resistant *Staphylococcus aureus* (MRSA)
- e. Influenza (during designated flu season months: Oct – Mar)

The findings will be reported monthly to ICC; quarterly to PIPS/NEC/MEC/NAF. Any changes to strategies already in place will be developed as needed based upon trend analysis.

5. **ZSFG Employee Health Program Reports** (early reporting available by request if needed to evaluate potential exposure or compliance issues):

- a. Standards determined by various authorities including CAL-OSHA, TJC, CDC
- b. Tuberculosis PPD Skin Conversions: annually
- c. Tuberculosis screening compliance rates: annually
- d. Tuberculosis cases in HCW: in all cases, as soon as suspected or identified.
- e. New employee immunity status/immunization compliance per ZSFG IC Manual, Policy 5.01; *Infectious Disease Screening*: reported annually.
- f. Influenza vaccine rate of administration and declination: reported as available Oct – March at monthly ICC meeting.

6. **SF City & County DPH: Bloodborne Exposure Incident Reporting:** annually (Point of Contact: Angela Platzer, SFDPH, 101 Grove)

C. QUALITY IMPROVEMENT INITIATIVE

1. **Utilize A3 Thinking processes to improve data analysis and information sharing to engender collaboration across the organization for the following HAI reduction efforts:**

- a. Preventing Hospital-Onset *Clostridium difficile* Illness
- b. Preventing Surgical Site Infections
- c. Improving Hand Hygiene Compliance

2. **Prevent indirect transmission of infectious organisms to our patients, visitors, and staff through proper environmental cleaning.**

- a. Participate in Performance Improvement team with representatives from Environmental Services (EVS), Environmental Health & Safety (EHS) and Infection Prevention & Control and other clinical departments as indicated.

- b. Tasks to be accomplished include:
 - 1) Work with EVS leadership team to develop a reporting mechanism for the existing EVS quality assurance program and present quarterly to ICC.
 - 2) Review EVS cleaning and disinfecting chemicals to ensure appropriate selection for ZSFG identified organisms while ensuring safe product for EVS personnel.

3. HAI Reduction Efforts: IC personnel have continuous participation in each focused HAI Reduction Task Force. The following actions have been selected by task force members.

- a. **CLIP/CLABSI:** Provide status reports to individual departments / services on CLIP bundle measure compliance using data generated by Epic system. Share number of days between CLABSI using tools available in the Epic system.
- b. **SCIP/SSI:** Provide support to Surgical Services to assist in reduction of surgical site infections with specific focus on Colon procedures. Continue to assist Ortho Service with *Staph aureus* screening prior to procedures with permanent implants for targeted decolonization with Mupirocin and ensure functionality of reports after Epic implementation.
- c. **CAUTI:** Work with task force to develop a process to promote physician and nurse communication around indication and continued need for foley catheter with the ultimate goal to promote early removal of catheter using tools and charting built into Epic. Share number of days since last CAUTI for each patient care unit using tools available in the Epic system.

D. PROGRAM RESOURCES

1. Personnel (in place)

- a. 1—Infection Prevention & Control Program Manager, CIC (also serves as IC Practitioner)
- b. 1—RN Infection Control Practitioners (CIC)
- c. 1—Part Time Infectious Diseases Pharmacist (also performs other functions)
- d. 2—Part Time Infectious Diseases Physicians (also perform other functions)
- e. 1—Systems Manager
- f. 1—Healthcare Analyst

2. Key Infection Control Data Items / Data Sources: IC Programmer Analyst has access to the following:

- a. Infection Control: IN-INFECT-CTRL SQL database and reporting server
- b. Microbiology / Clinical Laboratory: (Misys Sunquest system)
- c. Epic: SF system-wide EHR; restricted access

3. Infection Control Web Site: Infection Control maintains a web site on the CHN intranet and uses it to publish numerous policies, procedures and supplemental information to help prevent infections at ZSFG and ensure compliance with hospital policies, etc

Attachment 1

FY2019-2020 Infection Control Risk Assessment		Rank
Lack of Hand Hygiene		1
C. difficile		2
Facility-level: Failure of staff to follow established policy or procedures		2
Lack of PPE use - Gloves		3
SSI – Colorectal		4
Lack of Surgical Site Infection (SSI) Prevention		5
Lack of Respiratory Hygiene/Cough Etiquette		5
Influenza		6
Infection from improper cleaning/sanitizing/food handling in Food/Nutritional Services Department		7
Lack of PPE use - Mask/Eye shield		8
Lack of Central Line-associated Bloodstream Infection (CLA-BSI) Prevention		9
Infection from inadequate cleaning/disinfection in patient care areas		10
Varicella Zoster Virus / Chickenpox		10
Lack of current policies or procedures		11
Lack of bleach cleaning/disinfecting of surfaces when warranted		12
Lack of PPE use - Gowns		13
Central venous catheter-associated bloodstream infection		13
Ventilator-associated pneumonia		13
Lack of Catheter-associated Urinary Tract Infection (CA-UTI) Prevention		14
MRSA		15
Delay in detection of patients with MDROs (colonized or infected) / illnesses of concern related to travel (US and international)		15
ESBL-producing <i>E. coli</i>		16
Tuberculosis		16
Catheter-associated UTI		16
Carbapenem-resistant Enterobacteriaceae (CRE)		17
Vancomycin-resistant <i>Enterococci</i>		17
Non-specific HAI - Hospital-wide		17
Infection related to inadequate maintenance of water systems (e.g. plumbing fixtures, cooling towers, etc.)		17
Lack of Low Level Respiratory Precautions when warranted		18
SSI – Vaginal Hysterectomy		19
Exposure to Pandemic Influenza/Other Respiratory Infections		19
SSI – Spine with Implants		20
SSI – Total Knee		20
Infection related to construction/renovation		20
Infection from inadequate high-level disinfection of re-usable equipment		21
Multi-Drug Resistant Organisms (MDRO)		21
SSI – Abdominal Hysterectomy		21
Lack of Enhanced/Special Contact Precautions when warranted		22
Dialysis		22
SSI – Total Hip		23
SSI – Vascular Implants		23
Non-specific HAI - Long Term Care		23
Lack of High Level Respiratory Isolation when warranted		24
Lack of Ventilator-associated pneumonia (VAP) Prevention		25
Infection from inadequate sterilization of re-usable equipment / instruments		25
Infection from inadequate cleaning or low-level disinfection of equipment		25
Facility-level: Outbreak		26
Endoscopy		27
Infection related to inadequate air handling		28
Dental		28
Facility-level: Sentinel event		28
Exposure to Novel Pathogen(s) e.g. Viral Hemorrhagic Fever (Ebola)		28
Facility-level: Negative patient outcome from lack of MRSA Active Surveillance Testing Process		29

* Ranking Procedure: Initial list generated from categories recommended by the Association for Practitioners in Infection Control and Prevention, ZSFG historical data, and State of California mandates. Initial rankings were calculated using a three-part scoring system, whereby each category was evaluated by ICC members with regard to its likelihood, its impact, and the quality of any prevention or mitigation systems already in place. Final rankings were decided based on consensus of ICC members.

** All items in have mitigation and/or monitoring measures programmed into the IC annual plan; top 15 items will have additional mitigation measures added based on resource availability or if negative trend noted during routine IC rounds or by request/reports from other departments/services.