

INFECTION PREVENTION & CONTROL PLAN & RISK ASSESSMENT

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Expert care with a personal touch

Objectives

- Discuss how to conduct Infection Prevention Risk Assessment and develop an Infection Prevention & Control (IPC) plan
- How to identify areas of risk related to healthcare associated infections (HAI)
- Develop a robust HAI prevention program including evidence based practices

Nothing to disclose



Expert care with a personal touch

Infection Prevention & Control (IPC) Plan/Program

- List strategies/activities to prevent HAI within the organization
- Prepare and respond to outbreaks
- Community/Local Public Health
- Core elements of Infection Prevention & Control Program

<https://www.cdc.gov/infectioncontrol/guidelines/core-practices/index.html>



Elements of an IPC Plan/Program

An IPC programs should include (but not limited to):

- Visible, tangible leadership support for IPC
- A written annual risk assessment
- A written IPC plan based on the annual risk assessment
- IP policies and procedures
- Education
 - Healthcare workers
 - Patient and family
- Adherence monitoring and feedback
- Antibiotics Stewardship Program

<https://www.cdc.gov/infectioncontrol/guidelines/core-practices/index.html>



What is IPC Risk Assessment?

- Part of infection prevention and control planning process
- Serves a starting point of a well-developed plan
- Assist in focusing surveillance and other program activities
- Sets the priorities of the infection prevention program
- Meet regulatory requirements (CMS, TJC)

Regulatory Influence

- Identify risks for acquiring transmitting infections
- Risks are identify annually and when significant changes happens
- Interdisciplinary input
- Prioritize and document risk
- New/revise guidelines

Center for Medicare & Medicaid Services (CMS)

The standards include requirements to maintain a sanitary environment, designate an infection control officer and develop, implement and maintain an active infection prevention program.



How to conduct a Risk Assessment?

- Review historical Infection Prevention data
 - Last 3-5 year HAI - SIR
 - Device Utilization – SUR
 - MDRO
- Organization data
 - # of admissions, patient days, procedures, test etc...
- Community data
 - Tuberculosis report and Public Health Data
- Facility or local outbreaks
 - LAHAN, CaHAN and CDC Alerts
- Gaps in infection prevention practices

How to conduct a Risk Assessment?

- Sterilization/High Level Disinfection
- Hand Hygiene program
- Environmental Hygiene Program
- Exposure plan
 - BBP, ATD, TB Prevention
- Emergency Management
 - Influx of infectious patients
- Project Management
 - Major construction
- Occupational Health Services
 - Immunization
 - TB Conversion



How to conduct a Risk Assessment?

Assign Three Values to Each Risk

1. Probability of event occurring
2. Impact/Severity to organization
3. Current Preparedness

How to conduct a Risk Assessment?

Probability of Risk Occurrence – Things to consider

- Known Risk
- Historical data/Current data
- Report in literature

PROBABILITY				
Expect	Likely	Maybe	Rare	Never
4	3	2	1	0

How to conduct a Risk Assessment?

Impact/Severity – Things to consider

- Threat to life and/or death
- Disruption of services
- Loss of function
- Loss of community trust
- Financial impact
- Legal issue
- Regulatory impact
- Standard/requirements

RISK/IMPACT (Health, Financial, Legal, Regulatory)				
Loss of life/ limb/ function	Temp loss of function	↑ length of stay	Moderate clinical/ financial	Minimal
5	4	3	2	1

How to conduct a Risk Assessment?

Preparedness/Current Situation – Things to consider

- Current policy and procedures
- Implement of plans
- Training status
- Resources
- Community/public health resources

CURRENT SYSTEMS				
None	Poor	Fair	Good	Solid
5	4	3	2	1

Identify your Interdisciplinary Team

- IPC
- Employee Health
- Medical Staff
- Laboratory
- Nursing
- Respiratory Therapy
- Pharmacy
- Surgery
- Environmental Services (EVS)
- Facilities/Maintenance
- Project Management
- Ambulatory Services
- Quality Management
- Administration



Risk Assessment Meeting

Assign Values

- There are no right/wrong answer
- Discuss Each potential risk
- Push group for consensus on assignments of numbers of each components
- Keep group on target
- Important to be consistent
- Go through entire list of risks
- Keep records of changes/reasons

Benefits

- Spread the knowledge of what the IP does
- Increase the understanding of the IP plan
- Buy-in-from key stockholders
- Team building exercise
- Group decision

How to conduct a Risk Assessment?

Risk Score calculation

- Derived from agreed upon formula
- Determine a value below which no action is necessary
- Rank orders risk using risk scores
- Acceptance of risk is at the discretion of the organization

Prioritization  **Goals**



Sample IPC Risk Assessment

Risk Score = [(Probability X Severity)+Required] - Preparedness

Event	PROBABILITY	SEVERITY		S U B T O T A L	REQUIRED	PREPAREDNESS			S U B T O T A L	RISK
	Probability of Infection/Risk	Severity	Life Threatening		Required Program	Preparedness	Response	Asset Availability		Risk
Issue	Likelihood this will occur 0 = N/A 1 = Low 2 = Moderate 3 = High	Morbidity 0 = N/A 1 = Low 2 = Moderate 3 = High	Possibility of Death 0 = N/A 1 = Low 2 = Moderate 3 = High		Internal, CMS, CDPH, TJC Report to: 0 = No 1 = Internal 2 = Safety Collab 3 = External 4 = External+VBP	Preplanning & Prevention 0 = N/A 1 = Not (<20%) 2 = Partially (21%-90%) 3 = Totally (>90%)	Training, policies, procedures 0 = N/A 1 = Not 2 = Partially 3 = Totally	Availability of assets to resolve issues 0 = N/A 1 = Not Done 2 = Moderate 3 = Substantial		Relative Threat* Risk Score Min: 0 Max: 10.8
CLABSI										
COLO										
CLABSI - NICU										
MRSA BSI										
carbapenemase Resistant Enterobacteriaceae (CRE)										
CHOL										
SB										
VAC - Adult										
Candida auris										
APPY										
Clostridium difficile										
FX										

IPC Plan

- Developed based upon identified priorities and needs from the risk assessment
- Sets goals and objectives with strategies to meet the identified goals
 - Align with organizational goals
- Serves as functions for program, reports and your annual program evaluation

Tips for Developing Written IPC

- Develop outline of the IPC program
- Draft table of contents
- Network with others
- Include the essential elements
 - Authority statement
 - Scope of program
 - Surveillance and prevention activities
 - Reporting and accountabilities
 - Program Evaluation and Effectiveness
- Distribute your plan widely
- Review and approve through Infection Prevention & Control Committee, MEC and Governing Board

Contents of IPC Plan

- Type of healthcare setting
- Services provided and population served
- The surveillance program purpose
- The indicators (what are you monitoring)
- The methodology used for case definition
- Data collection/Analysis
- Goals and Objective
- Community/Public Health
- Types of reports generated and to whom they are provided
- Process used to evaluate the surveillance program

Goals/Objective and Action Section:

Goals are based on the prioritized risks identified during the completion of facility risk assessment. The purpose of the program goals and plan are to focus on limiting unprotected exposure to pathogens as well as minimizing risk associated with medical procedures, medical equipment and invasive devices.



Sample Goals and Objectives

Assessment: 40% HCW received influenza vaccine last year

Goals: Increase influenza immunization rate in HCWs next season

Objectives: Increase influenza immunization rate in patient care areas HCWs next season by 80%



Sample Goals and Objectives

Goal	Objectives
<p>A broad statement about the long-term expectation of what should happen as a result of your program (the desired result). Serves as the foundation for developing your program objectives.</p> <p>Criteria: 1) Specifies the STD problem or STD-related health risk factors; 2) Identifies the target population(s) for your program.</p>	<p>Statements describing the results to be achieved, and the manner in which they will be achieved. You usually need multiple objectives to address a single goal.</p> <p>Criteria: SMART attributes are used to develop a clearly-defined objective.</p>

Attributes of **SMART** objectives:

- **Specific:** includes the “who”, “what”, and “where”. Use only one action verb to avoid issues with measuring success.
- **Measurable:** focuses on “how much” change is expected.
- **Achievable:** realistic given program resources and planned implementation.
- **Relevant:** relates directly to program/activity goals.
- **Time-bound:** focuses on “when” the objective will be achieved.

<https://www.cdc.gov/std/program/pupestd/developing%20program%20goals%20and%20objectives.pdf>

Evaluation of IPC Program

- Team Approach and Data driven
- The usefulness and ability to meet the organization's objectives
- Revisions should be made as needed
- Compare program structure and activities to current practices and published recommendations for surveillance
- The program resources
 - Adequate number of trained personnel
 - Appropriate computer hardware and software, or lab support
 - Need for data analyst, or administrative support

Benchmarking and Comparing Data

- Benchmarks are measures against which outcomes and processes can be compared.
- There are external benchmarks that can be used for inter-facility comparisons of HAIs and other adverse events.
 - CMS /VPB Threshold/Benchmarks
 - NHSN Annual report
 - CDPH Annual reports
 - Quality Improvement Organization (QIO)

<http://www.cdc.gov/nhsn/>



Sample IPC Plan



2024-2025 Infection Prevention Plan



Department of Epidemiology & Infection Prevention



Sample IPC Plan – Table of Contents

TABLE OF CONTENTS	
Executive Summary	3
About Pomona Valley Hospital Medical Center	4
Mission, Vision, Values	4
Organizational Structure	5
Scope of Services	6
Infection Prevention Program	7
Mission, Vision, General Goals	7
Communication of IP Data	8
IP Department Resources	10
IP Involvement in the Organization	12
IP Involvement in the Community	13
Infection Prevention Statement of Authority	14
Risk Assessment/Annual Program Evaluation	14
Pomona Valley Hospital Medical Center Statistics	15
Cost Analysis of Hospital Acquired Infections (HAI)	17
Infection Prevention Program Goals, Objectives and Measures of Success	18
Clostridioides Difficile Infection (CDI)	18
Central Line Associated Bloodstream Infections (CLABSI)	21
Catheter Associated Urinary Tract Infection (CAUTI)	25
Ventilator Associated Event (VAE)	29
Multidrug Resistant Organism Surveillance (MDRO)	32
Antibiotic Stewardship Program (ASP)	33
MRSA/VRE Bloodstream Infection (BSI) Surveillance	34
Hand Hygiene Program	35
Influenza Vaccination Program for HCW	40
Tuberculosis Surveillance	42
Surgical Site Infection (SSI)	44
Surveillance Program	52
Additional IP Activities & Partnership	53
New Relevant Guidelines	61
Infection Prevention Data Validation/Assessment	62
Appendices	63
Appendix A: PVHMC Infection Prevention Risk Assessment (Main Hospital)	64
Appendix B: PVHMC Infection Prevention Risk Assessment (Offsite Locations)	65
Appendix C: Sample Department Specific Reports	65
Appendix D: List of Terms & Abbreviations	67
Administrative Policy Statement and Approval of Infection Prevention Plan	69

Sample IPC Plan

Meriter Unity Point Infection Prevention and Control Plan 2016

PURPOSE

UnityPoint Health- Meriter is a community based healthcare organization which strives to provide high quality health care services in a safe and cost effective manner. The Infection Prevention Program supports this effort by defining a systemic, coordinated and continuous approach to improving performance by focusing upon surveillance, prevention and control of infections throughout the organization. This Infection Prevention Program is a multidisciplinary collaboration to support the organizations effort to improve patient safety and quality of care.

This program plan applies to the following locations:

1. Hospital
2. Ambulatory Care Sites
3. Administrative Buildings

GOALS

There are three principal goals for the UnityPoint Health-Meriter Infection Prevention Program.

1. Protect the Patient by minimizing the risk of transmission of pathogen's associated with procedures, medical equipment, and medical devices in an effort to reduce morbidity and mortality and shorten periods of illness and hospitalization.
2. Protect healthcare workers, visitors and others in the healthcare environment. This is accomplished by limiting unprotected exposure to pathogens using administrative controls, engineering controls, isolation, hand hygiene, barrier precautions including personal protective equipment (PPE), case investigation, education, immunization, and employee health programs that protect employees from work-related exposures.
3. Accomplish the previous two goals in a cost effective manner by preventing costs associated with the treatment of complications due to healthcare associated infections.

SCOPE AND AUTHORITY

The Infection Prevention Program implements a multidisciplinary collaborative plan designed to prevent and control the spread of infection based upon the clinical needs and demographics of our patients and employees. The Centers for Disease Control and Prevention's (CDC) National Healthcare Safety Network (NHSN) is used to define healthcare associated infections. An Infectious Disease Physician contracted by UnityPoint Health-Meriter provides oversight for the Infection Prevention Program and Employee Health Services Program. The Infection Prevention Program plan is designed to protect patients, healthcare workers and visitors and to ensure the optimal operation of the healthcare system by means of the

Summary

- The IPC Risk Assessment is a living document that is tailored to the facility, updated annually or when there are significant changes
- An IPC plan can be thought as roadmap to the facility for effective IPC program

Resources

- CDC – Center for Disease Control and Prevention
- APIC- Association for Professional in Infection Control and Epidemiology
 - Local APIC chapter
 - CACC – California Coordinating Council
- SHEA - Society for Healthcare Epidemiology of America
- NHSN – National Healthcare Safety Network
- CDPH – California Department of Public Health
- TJC - The Joint Commission





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