



# **Project Firstline: Infection Control Training and Education**

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# Objectives

- Summarize the role of an Infection Preventionist
- Discuss the relationship between Infection Prevention and Control and Antimicrobial Stewardship
- Provide information about Project Firstline and the role of Infection Prevention and Control education in increasing quality and safety



# Role of Infection Preventionist

- Look for patterns and spot clusters of infections in healthcare facilities
  - Infections caused by antibiotic-resistant organisms
  - Infections associated with invasive procedures and indwelling devices
- Track infection data and activities to prevent healthcare-associated infections
- Integrate evidence-based infection prevention practices into facility-wide policies, guidelines, protocols, and educational strategies
- **Work with clinical teams to limit unnecessary antimicrobial use to prevent the spread of antimicrobial resistance**
- **Educate healthcare personnel and the public about infectious diseases and how to limit their spread**

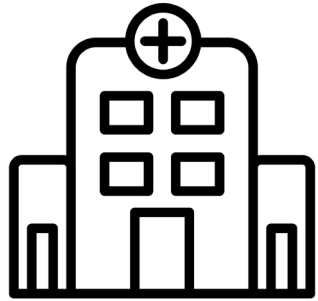


# Role of Infection Preventionist cont.

- Observe and coach healthcare personnel on:
  - Proper hand hygiene
  - Use of personnel protective equipment
  - Cleaning of hospital rooms and medical instruments
- Communicate and consult with public health agencies
- Report communicable diseases to the CDC and other public health agencies
- Serve as leaders and subject-matter experts in preparing healthcare facilities, personnel, and the public for health threats
- Collaborate with regulatory partners to ensure compliance with accreditation agencies



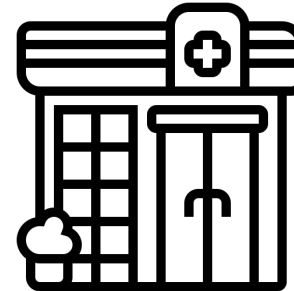
# ★ Care Settings



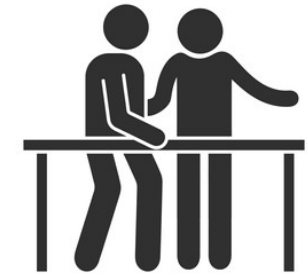
Hospitals and Health Systems



Nursing Homes and Long Term Care Settings



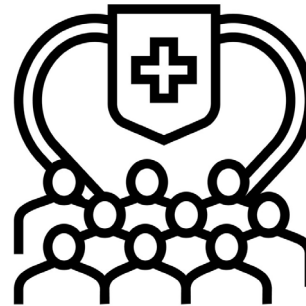
Outpatient Clinics and Surgery Centers



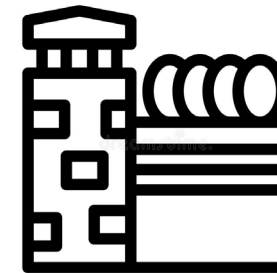
Rehabilitation Centers



Behavioral Health Units



Public Health Agencies



Jails and Prisons

IPs also consult with schools, businesses, and other entities on how to keep the public safe and prevent the spread of infectious diseases.



# Infection Preventionist Backgrounds

- Nursing
- Public Health
- Microbiology
- Laboratory Studies
- Medical Technology
- Information Technology
- Allied Health Professions





# Infection Prevention and Control (IP&C) and Antimicrobial Stewardship (AS)

- Share the common cause of keeping patients safe and improving patient outcomes
- Stewardship curbs antibiotic misuse and overuse, which can lead to the development of MDROs and *Clostridioides difficile* infections (CDI)
- Combined implementation is more effective than either alone
  - Data show that the addition of AS interventions can enhance the results of robust IP&C measures, particularly when addressing outbreaks
- AS programs reduced the incidence of infections and colonization with MDR gram-negative bacteria, ESBL-producing gram-negative bacteria, and MRSA, as well as the incidence of CDI



# Synergizing IP&C and AS

- Effective IP&C programs reduce the demand for antimicrobial agents by preventing infections from occurring
- IP&C decreases the transmission of infections within the facility, further reducing antimicrobial use
- Infection Prevention and Healthcare Epidemiology leaders are credible IP&C subject-matter experts who can partner with AS leaders to effectively engage the different professional disciplines to promote, implement, support, sustain, and evaluate IP&C strategies across practice settings



# Infection Preventionists and ASP Activities

**Table 1**

ISPC department time spent on ASP activities per month

	>5 hours %	<5 hours %	None %
HAI data analysis	84	14	2
MDRO infection surveillance	72	27	2
Generating and submitting HAI data for public reporting	71	23	5
Interpreting microbiology lab results (eg, cultures, rapid molecular testing)	69	25	6
Auditing unit-based infection prevention policies	67	31	3
Prevention of multidrug-resistant organism transmission	64	34	3
<i>Clostridioides difficile</i> surveillance	63	34	3
Disseminating HAI data to stakeholders	60	44	7
Providing HAI data driven feedback to individuals and groups	53	42	5
Antibiotic stewardship policy development, implementation and evaluation	21	54	24
Educating nurses on appropriate collection of microbiology specimens (eg, cultures, rapid molecular testing)	19	54	26
Implementing the joint commission antimicrobial standard	18	42	40
Data entry in the NHSN AU module	17	15	68
Working with ASP leaders to align the ASP ISPC programs	16	65	18
Data analysis for AS related activities (eg, frequency of antibiotic timeout)	11	20	69
Educating patients on appropriate antibiotic use	10	31	59
Participating in antibiotic timeouts during patient care transitions	4	19	77

ASP, antimicrobial stewardship program; AU, antibiotic utilization; HAI, health care-associated infection; MDRO, multidrug-resistant organisms; NHSN, National Healthcare Safety Network.

# ★ IP Time Spent on ASP Activities: Selection

Activity	>5 hours spent monthly (%)	<5 hours spent monthly (%)	None (%)
MDRO Infection Surveillance	72	27	2
Prevention of MDRO Transmission	64	34	3
<i>Clostridioides difficile</i> surveillance	63	34	3
Aligning ASP and ISPC Programs	16	65	18

# Infection Control Assessment and Responses (ICARs)

- The CDC has developed standardized assessment tools for Infection Prevention and Control, including an Antimicrobial Stewardship Module.
- [Module 1 – Training, Audits, Feedback](#)
- [Module 2 – Hand Hygiene](#)
- [Module 3 – Transmission-Based Precautions](#)
- [Module 4 – Environmental Services \(EVS\)](#)
- [Module 5 – High-level Disinfection and Sterilization](#)
- [Module 6 – Injection Safety](#)
- [Module 7 – Point of Care \(POC\) Blood Testing](#)
- [Module 8 – Wound Care](#)
- [Module 9 – Healthcare Laundry](#)
- [Module 10 – Antibiotic Stewardship](#)
- [Module 11 – Water Exposure](#)



# Infection Control Training and Education

- Given the close relationship between Infection Prevention and Antimicrobial Stewardship, strengthening IP&C programs with education becomes critical.
- There are many resources available to deliver infection control training and education.
- Project Firstline is one way to provide IP&C education to frontline healthcare workers.





# Project Firstline

- CDC launched Project Firstline (PFL) in October 2020 to address longstanding gaps in infection control knowledge and practice in U.S. healthcare settings.
- As a collaborative, Project Firstline works with a diverse partner network to develop content that helps healthcare workers understand, think critically about and apply infection control actions.
- Project Firstline offers easy-to-use, accurate, and free infection control training resources in multiple formats to align with healthcare workers' learning needs and preferences.
- By meeting healthcare workers where they are, Project Firstline supports frontline healthcare workers in better understanding and applying infection control as part of their role.



# PFL Intended Audience

- Allied Health Professionals
- Certified Nursing Assistants
- Environmental Services Technicians
- Nurses
- Physicians
- Other Frontline Staff

# CDPH PFL Program

- Trainings are offered free of charge
- CEUs provided for most trainings
- Additional Resources and Tools Available:
  - Interactive Scenarios
  - Micro-Learns
  - Toolkits
  - Factsheets
  - Specialized resources (e.g., ventilation, etc.)
  - Newsletters
- Trainings can be offered for various durations
- We provide equipment and swag!



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# ★ Facility Engagement

- Deliver content through a variety of training formats including:
  - In-Person
  - Virtual
  - Hybrid
- Healthcare skills days
- New hire orientations





# Currently Available Trainings

- The Concept of Infection Control
- Hand Hygiene
- The Basic Science of Viruses
- Virus Strains
- How Viruses Spread from Surfaces to People
- How Respiratory Droplets Spread COVID-19
- How COVID-19 Spreads - A Review
- Asymptomatic Spread of COVID-19
- Ventilation
- Multi-Dose Vials
- PPE Part 1 - Eye Protection
- PPE Part 2 - Gloves & Gowns
- PPE Part 3 - Respirators
- Source Control
- Environmental Cleaning & Disinfection
- Prevention of CAUTIs
- Bacterial Infections





# Project Firstline Overview

- Since the January 2023, the CDPH PFL team has conducted 52 training events with over 850 attendees
- The most common training topics include:
  - Hand Hygiene (30.8%)
  - Environmental Cleaning and Disinfection (26.9%)
  - How Viruses Spread from Surfaces to People (11.5%)
  - The Concept of Infection Control (9.6%)
- 7 new training topics cleared for use in 2024
- 420 continuing education hours awarded

# Schedule a Training!



Contact Us: [projectfirstline@chicago.org](mailto:projectfirstline@chicago.org)

