

PROJECT FIRSTLINE

Infection Prevention & Control

Quick Start Guide



TABLE OF CONTENTS

INTRODUCTION	1
ROLE OF LOCAL HEALTH DEPARTMENTS IN INFECTION PREVENTION AND CONTROL	2
Local Health Department and Healthcare Relationship Building	3
TRAINING	5
INFECTION PREVENTION AND CONTROL BASICS	7
Healthcare Risk Recognition and Transmission	8
Hand Hygiene	9
Personal Protective Equipment	10
Environmental Cleaning and Disinfection	11



INTRODUCTION



The Centers for Disease Control and Prevention's (CDCs) [Project Firstline](#) is a collaborative comprised of diverse healthcare and public health partners that aims to provide engaging, innovative, and effective infection prevention and control (IPC) training to the more than 22 million frontline healthcare workers in the United States, as well as members of the public health workforce. Project Firstline aims to provide every person working in a U.S. healthcare facility with a foundational understanding of IPC and the confidence to use it every day to protect the nation from infectious disease threats, such as COVID-19.

Quick Start Guide Purpose/Overview

The onset of COVID-19 pandemic highlighted gaps in knowledge of infection control practices and principles. The goal of Project Firstline is to provide infection prevention and control training designed especially for healthcare workers. Project Firstline aims to provide comprehensive, transparent, and responsive training so front-line workers can be better prepared for new and emerging public health threats.

Working at a local health department (LHD), you may be tasked with supporting healthcare facilities by providing recommendations, delivering training and education, providing consultative services, and supporting outbreak response. This quick start guide highlights resources that aim to support LHDs with training healthcare workers in IPC. A variety of sources including articles, job aids, and interactive modules are included on topics ranging from risk identification and management and IPC actions like hand hygiene and PPE.

The Role of Local Health Departments in Infection Prevention and Control

LHDs are the chief health strategists in their communities and can play a vital and diverse role in infection prevention and control, prevention of and response to healthcare-associated infections, and antibiotic stewardship. When properly funded, LHDs are in the unique position to:



Provide Education



Convene Facilities



Share Data

🔗 Check out the “LHD Features” below to learn more about two examples of what this work has looked like in other jurisdictions.

LHD Feature: Philadelphia

The Philadelphia Department of Public Health (PDPH) developed a regional HAI/AR Collaborative comprised of healthcare providers and experts dedicated to preventing healthcare-associated infections and antimicrobial resistance. Through this collaborative, PDPH is able to provide leadership, advocacy, and resources on best practices for infection prevention and control and antimicrobial stewardship and facilitate coordinated prevention efforts and communication between healthcare facilities, and provide educational events which are archived [here](#).

LHD Feature: Los Angeles County

The Los Angeles County Department of Public Health (LACDPH) adapted an existing state course on the Basics of Infection Prevention for Long-Term Care Settings. This course is an educational program offered by the LACDPH free of charge for Infection Preventionists (IPs) and associated staff who work in long-term care settings, including skilled nursing facilities.

The course covers

- How to build and sustain an IPC program.
- How IPC relates to employee health.
- Epidemiology, microbiology, and surveillance for IPC.
- Methodology for developing an antimicrobial stewardship program.
- Importance of the environment of care and environmental services in IPC.

Learn more and check out archived presentations [here](#).

LHDs have strong foundations to support this work, including relationships with healthcare facilities, and can support facilities through activities that they regularly conduct and excel at, including surveillance, outreach, and education. For example, LHDs often provide on-site or consultative assistance for general infectious disease outbreaks in health care facilities, such as influenza and Norovirus infection. Consider how to leverage these interactions as opportunities to build upon to support proactive infection prevention and control efforts.

The content in this quick start guide is designed to support you, local health department staff, in your role as educators and trainers in your community's healthcare facilities.

🔗 Check out [this NACCHO video](#) on the role of LHDs in addressing HAIs and antimicrobial resistance or share [this infographic](#) with partners to help them better understand the unique role of LHDs.

🔗 To understand the broader landscape of what LHDs are doing in this field, read this [JPHMP Article: Lessons in Infection Control: The Role of Local Health Departments in Prevention, Preparedness, and Response](#).





Building relationships is a key first step to be able to provide IPC support and education to the facilities in your community.

Not sure where to start? Check out CDC's [Local Health Department Strategy for Response, Control, and Prevention of Healthcare Associated Infections \(HAI\) and Antibiotic Resistance \(AR\)](#). This strategy outlines three main goals to strengthen LHD capacity to respond to, control, and prevent HAI/AR across all healthcare settings and the first goal is to grow strong partner networks. The suggested objectives and activities under this goal may provide some strategies for getting started!

Strategies from NACCHO Members for Building Relationships with Healthcare Partners

- Attend regional chapter meetings of The Association for Professionals in Infection Control and Epidemiology (APIC).
- Attend facility-specific infection control meetings to build relationships with healthcare facility staff.
- Share public health surveillance and the implications for IPC (e.g. share when flu is starting to circulate in the community and provide reminders on flu prevention).
- Leverage existing projects, led by other partners (e.g. the state health department or academic partners in the community) to begin building relationships.
- Consider "snowball introductions," where you ask current contact (e.g. Infection preventionist) to connect you with other key facility staff, such as Directors of Nursing and environmental cleaning staff.
- If possible, designate a single point-of-contact for facilities to reach out to.

TRAINING



One of the goals of this quick start guide is to share resources that provide guidance on effective training strategies. Your role as a training facilitator is very important. Successful training using Project Firstline materials can help your audiences build a culture of providing safer, higher-quality care, and prevent infections – not only among patients, but also among staff. A few important things to keep in mind are below. Be sure to start with the Project Firstline facilitator guide (see next page).

Before going to a facility to provide training and education, take time to think about the following questions:

- Who is your audience—what are their general job duties, what have their experiences been, how familiar are they likely to be with infection control?
- What is your audience expecting, based on the event announcement?
- Is there an opportunity to share information before the session?
- How can you best set the proper expectations, in advance and at the beginning of the session?
- Do the participants understand what is expected after the session (e.g., evaluation and follow-up)?
- How will you manage large or smaller groups?

Remember that preparation is the most important aspect of your presentation. After the questions above have been answered, be sure to practice the technologies that you will be using and rehearse your material!

When you are beginning to lead your session, be sure to utilize effective, respectful, and appropriate communication skills – speak slowly and clearly and reduce environmental distractions. If your training session is online, try making eye contact with the camera rather than just looking at the screen for a more personable effect. When interacting with the audience, give them your undivided attention and acknowledge their message/response. Encourage participation by showing that you are listening. Smile (when appropriate), utilize open and interested posture and use small phrases such as “yes” and “I see,” when an audience member is speaking.

- [See this page](#) for infection control training toolkits.
- [See this page](#) for quality training development resources.

In addition to utilizing effective facilitator methods, it’s important to be aware of different language preferences among your audiences. To assist in reaching a broader audience effectively, try utilizing this page for [Project Firstline resources in Spanish](#).

Also check out fellow the Asian and Pacific Islander American Health Forum [Facebook page](#) for a collection of IPC videos and resources in various Asian, Native Hawaiian, and other Pacific Islander languages. Lastly, please refer to the [Project Firstline Partner page](#) - many of these partner organizations have resources that are culturally inclusive to various communities!



INFECTION PREVENTION – BASICS



When conducting IPC trainings, understand that your audience may range in their understanding of IPC protocols and procedures. To help build rapport, reassure the audience that you are supporting their overall efforts in IPC protocols.

Explain that IPC describes an approach that aims to prevent the spread of infections in healthcare settings including [healthcare-associated infections \(HAIs\)](#) and emerging infectious diseases. IPC activities include but are certainly not limited to, hand hygiene, use of personal protective equipment (PPE), safe injection practices, and proper environmental cleaning. Some healthcare facility staff may not understand what your health department does. It may be helpful to review the primary roles of LHDs, such as providing and interpreting guidance for facilities, making recommendations for infection control after an outbreak occurs and preventing outbreaks by proactively identifying opportunities with facilities to close gaps in IPC practices.

Also be sure to note the IPC practices that are applicable to the healthcare setting. For example, IPC protocols set in place for hospitals may differ from those in outpatient settings or long-term care facilities. Check out the *Infection Prevention – Best Practice* section for more information! Another aspect you could mention is [Infection Control Assessment Tools](#) – these are used to conduct infection control assessments in healthcare facilities. They are a helpful tool for identifying IPC gaps in a facility. Understanding these gaps can allow you to better tailor trainings based on each facility's unique needs.

Risk Recognition

What does it mean to [recognize risk](#)? When healthcare workers learn to spot the opportunities for germs to spread, then they can act to help stop germs from spreading and prevent infections.

To recognize infection risks, healthcare workers need to understand:

- 1 Where germs live (their reservoirs), and
- How they can get from place to place or to people to cause an infection (through pathways).

2 When conducting training on risk recognition be sure to explain that germs can be found in the [human body](#) and the [healthcare environment](#). While most germs are not harmful to us, the risk of exposure to a germ that causes illness is significantly increased in the healthcare setting. Patients seeking medical treatment for an illness usually have weakened immune systems leaving their body more susceptible to infection.

☐ Practice your knowledge of reservoirs [here](#) with this interactive infographic!

☐ Posters and infographics: [Print Materials and Job Aids from Project Firstline | Infection Control | CDC](#)

Common Methods of Transmission in Healthcare



Every day, we encounter germs. Understanding how germs spread in healthcare is important to protect patients, healthcare workers, and others. The above images depict common methods of transmission of germs within the healthcare setting. Germs can be spread through touch,, by being breathed in, through splashes and sprays, and through clinical care tasks that bypass or break down the body's natural defenses.

☐ Visit [this page](#) to learn more about infection control in healthcare.

Hand Hygiene

Hand hygiene is a foundational yet essential component of IPC in healthcare. Recall that one of the methods of transmission is by touch.

📺 This [video](#) on hand hygiene in healthcare would be a good resource to use at the beginning of a training session to highlight its importance

📄 Visit this page for [hand hygiene FAQs](#)

Hand hygiene comes in two forms: soap and water vs. alcohol-based hand sanitizer:

Use Alcohol-Based Hand Sanitizer

- Immediately before touching a patient
- Before performing an aseptic task or handling invasive medical devices
- Before moving from work on a soiled body site to a clean body site on the same patient
- After touching a patient or the patient's immediate environment
- After contact with blood, bodily fluids, or contaminated surfaces
- Immediately after glove removal

Use Soap and Water

- When hands are visibly soiled
- After caring for a person with a known or suspected infectious diarrhea
- After known or suspected exposure to spores (e.g. *B. anthracis* and *C. difficile*)

📄 Check out the [Clean Hands Count Campaign](#) page for posters, factsheets, and brochures for healthcare providers and patients!





Personal Protective Equipment

What is PPE?

Just as hand hygiene, this is a topic that still should be reviewed. During your training session, be sure to emphasize that correct use of PPE in healthcare protects the wearer and protects others by helping to keep germs from spreading.

PPE should always be used correctly and at the right times to help prevent the spread in infection!

Typical PPE utilized in the healthcare setting:

- Gown
- Facemask
- Eye protection such as goggles or a face shield
- Gloves
- Respirator

☐ Review this [PPE Sequence](#) document, which illustrates an example of a correct way to put on and take off PPE.

☐ Pop quiz! Have your training participants test their knowledge of selecting the correct PPE here with this [PPE interactive resource](#).

Environmental Cleaning and Disinfection

All healthcare workers including doctors, nurses, and environmental service personnel also play a key role of helping to prevent infection by following guidelines of environmental cleaning, disinfection, and sanitizing (yes, there is a difference!). Take the [Environmental Services Personnel and HAI Prevention Course](#) to learn more about what EVS workers do and their critical role in infection prevention and control!

- *Cleaning* refers to the removal of dirt, grime, and some germs.
- *Disinfecting* refers to the process of killing germs on surfaces. While cleaning removes some germs, it does not kill germs.

🔗 Check out this [learning experience](#) created by the National Network of Public Health Institutes that breaks down the difference between cleaning and disinfection further!

When cleaning, disinfecting, or sanitizing, it is important to understand which products do what and how to use those products properly. This is why it's essential to read the label of whichever product you are using.

📄 Please check out this CDC graphic that illustrates [how to read a disinfectant label](#)

Another important component for proper disinfection to discuss is contact time. Contact time refers to the amount of time that a disinfectant must remain on a surface, undisturbed, in order to do its job of killing germs. Different disinfecting products have different contact times. For another learning experience by the National Network of Public Health Institutes, visit [here](#).

Ensuring thorough environmental cleaning can be challenging. This [comprehensive toolkit](#) may provide help to facilities with opportunities for improvement.



This quick start guide is meant to introduce foundational IPC concepts and to support your LHD staff in their roles as educators and trainers in your community's healthcare facilities. This guide has covered the roles of LHDs in IPC, strategies for building relationships with healthcare partners, training concepts, and other various IPC concepts. While this guide does not replace an in-depth IPC education course, it serves as a first step into this necessary work. Please utilize these resources to best fit your LHD training efforts. In addition, please keep up with the CDC Project Firstline for the most up to date resources and the NACCHO IPC Resource Library for best practice, practical tools, more training resources, and more!

Disclaimer: *Project Firstline is a national collaborative led by the U.S. Centers for Disease Control and Prevention (CDC) to provide infection control training and education to frontline healthcare workers and public health personnel. The contents of this guide do not necessarily represent the policies of CDC or HHS and should not be considered an endorsement by the Federal Government.*

Acknowledgements: This report was supported by the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award (award no. 6 NU38OT000306-02-08).



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Prevent. Promote. Protect.



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CDC's National Training Collaborative
for Healthcare Infection Prevention & Control



APPENDIX A

Quick Start Guide Resources

Appendix A compiles all downloadable, linkable, and accessible resources referenced in the *Project Firstline Infection Prevention & Control Quick Start Guide*, organized by section for quick reference. Whether you are revisiting a specific topic or building a training, this appendix is designed to help you locate and access materials efficiently.

Tips for usage

- All resources linked throughout the Quick Start Guide are compiled in Appendix A, organized by section and listed in the order they appear in the document.
- Resources are grouped by Guide section, with each resource indicating the corresponding page numbers for easy cross-reference.
- Resources available for direct download are marked with a download icon (📄), indicating these documents can be saved directly to your device.
- If a resource link is broken or a tool is no longer available, please contact idiseases@naccho.org for the most current version or updated guidance.

Quick Start Guide Resources

SECTION 1: INTRODUCTION & ROLE OF LOCAL HEALTH DEPARTMENTS IN INFECTION PREVENTION AND CONTROL

Resource Link	Page	Type
<u>LHD Feature: Philadelphia PDPH HAI/AR Collaborative — Archived Educational Events</u>	2	Webpage
<u>LHD Feature: Los Angeles County LACDPH Basics of Infection Prevention for Long-Term Care Settings — Archived Presentations</u>	2	Online training
<u>NACCHO Video: Role of LHDs in Addressing HAIs and Antimicrobial Resistance</u>	3	Video
<u>NACCHO Infographic: The Unique Role of LHDs in IPC</u> 	3	Infographic
<u>JPHMP Article: Lessons in Infection Control — The Role of LHDs in Prevention, Preparedness, and Response</u>	3	Journal article
<u>CDC's Local Health Department Strategy for Response, Control, and Prevention of Healthcare Associated Infections (HAI) and Antibiotic Resistance (AR)</u> 	4	One-page PDF document

SECTION 2: TRAINING

Resource Link	Page	Type
<u>CDC Training and Educational Materials (including infection control training toolkits) in English and Spanish</u>	6	Webpage
<u>CDC Training Development Resources in English and Spanish</u>	6	Webpage

Quick Start Guide Resources

SECTION 2: TRAINING (cont.)

Resource Link	Page	Type
<u>Asian and Pacific Islander American Health Forum's Facebook - IPC videos and resources</u>	6	Webpage
<u>CDC Project Firstline Partner Page</u>	6	Webpage

SECTION 3: INFECTION PREVENTION - BASICS

Resource Link	Page	Type
<u>CDC's Healthcare-Associated Infections (HAIs) Overview</u>	7	Webpage
<u>CDC's ICAR Tool for General IPC Across Settings</u>	7	Webpage
<u>CDC Project Firstline Video: Recognizing Risk</u>	8	Video
<u>CDC PFL: Body Reservoirs Training Booklet</u> 	8	PDF document
<u>CDC PFL: Where germs live and how they spread</u>	8	Webpage
<u>CDC PFL: Where Germs Live in Healthcare Interactive Scenario</u>	8	Interactive infographic
<u>CDC Infection Control in Health Care: An Overview</u>	8	Webpage
<u>CDC PFL Video: Hand Hygiene in Healthcare</u>	9	Video
<u>CDC Hand Hygiene Frequently Asked Questions</u>	9	Webpage

Quick Start Guide Resources

SECTION 3: INFECTION PREVENTION - BASICS (cont.)

Resource Link	Page	Type
CDC Clean Hands Count Campaign Materials	9	Webpage
NNPHI Training: What is Personal Protective Equipment?	10	Online training
CDC Sequence Instructions for Using PPE 	10	Infographic
CDC Interactive PPE Scenarios	10	Webpage
CDC's EVS and the Battle Against Infections Training	11	Online training
NNPHI Training: Cleaning & Disinfection	11	Online training
CDC How to Read a Disinfectant Label 	11	Infographic
NNPHI Training: Why Does Contact Time Matter for Disinfection?	11	Online training
CDC Environmental Cleaning in Healthcare Settings Toolkits	11	Webpage