

The Project Firstline Escape Room and Other IPC Education and Communication Tools

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New Jersey Department of Health



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. National Association of County and City Health Officials (NACCHO) is proud to partner with Project Firstline to host the NACCHO Healthcare Infection Prevention and Control Summit (Summit), as supported through CDC Grant # 6NU380T000306-03-05. CDC is an agency within the Department of Health and Human Services (HHS). This presentation is being hosted as part of the Summit; the contents of this presentation and Summit do not necessarily represent the policies of CDC or HHS and should not be considered an endorsement by the Federal Government.

Learning Objectives

- Understand the role of ELC partners in promoting infection prevention and control (IPC) education.
- Identify key strategies employed by ELC partners to enhance IPC education among healthcare professionals.
- Recognize the impact of effective IPC education on reducing healthcare-associated infections and improving patient outcomes.
- Assess the effectiveness of IPC education interventions in promoting adherence to infection control protocols and reducing the transmission of healthcare-associated infections.
- Evaluate the challenges and barriers faced by ELC partners in implementing IPC education programs within diverse healthcare environments.

Agenda

- Project Firstline Partnerships
- The Project Firstline Escape Room
 - Development
 - Testing and Implementation
 - Escape Room Overview
 - Training Environment
 - Outcomes
 - Improvement Strategies
- Other IPC Communication Methods
 - Social Media
 - IPC Tips of the Week



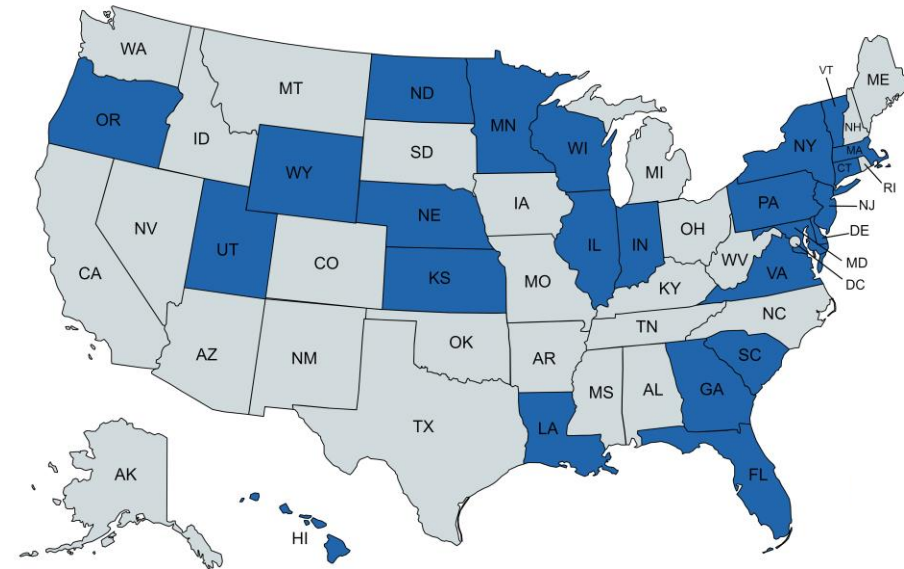
Project Firstline Partnerships



The Project Firstline Escape Room and Other IPC Education and Communication Tools

Project Firstline States Workgroup

- PFL NJ established a workgroup in Spring 2021 originally consisting of 9 PFL jurisdictions
 - Mixture of state health departments and contractors
- Goal of workgroup was to create a space for jurisdictions to share resources, gain support, discuss how to utilize/adapt PFL content, and address programmatic challenges.
- NJDOH received approval from CDC in 2022 to count our workgroup as a “CDC-PFL supported Community of Practice”.
 - An activity tied to our program’s workplan to CDC
- Has grown to 24 PFL jurisdictions as of April 2024.



The PFL

ESCAPE ROOM

Experience



**PROJECT
FIRSTLINE**

CDC's National Training Collaborative
for Healthcare Infection Control



The Project Firstline Escape Room and Other IPC Education and Communication Tools

Development of the Project Firstline Escape Room

Development Team

- **Utah**

- Janelle Kammerman
- Sarah Rigby

- **New Jersey**

- Jasmine Davis
- Miriam Gonzales
- Celina Koh
- Kelly McLaughlin

- **New York**

- Jackie Pappalardi
- Melony Spock
- Jessica Van Wormer
- Lisa Volk

- **Wyoming**

- Crystal Morse
- Jennifer Adu

- **Casper College**

- Riley Ramsey
- Alaina Griffiee

Our Goal and Audience

- Create an interactive training tool and skill building exercise to emphasize and apply key infection control principles.
- Primary audience:
 - All healthcare and public health workers
 - All healthcare and public health students



Product Approval Process for Partners

- Before developing content for a PFL infection control product, a completed PFL Product Brief form must be submitted to CDC for review and approval.
- The Product Brief helps CDC understand the purpose of the product and identify any red flags and plan for any required CDC support before partners complete a first draft of content, finalize dates, promote an event, etc.
- This helps ensure CDC and partners are on the same page from the beginning of product development and saves editing and review time later.
- Estimated time for CDC review/approval/feedback - 3 business days.

PFL Product Brief (Please submit in Word document format)

Jurisdiction:

Date:

Name of Product:

Type of product (presentation, video, fact sheet, etc.):

If a presentation, is a CDC SME required to speak, facilitate, or otherwise participate in the event? If yes, please explain and include the proposed date of the event:

Approval requested by (POC): **Audience, Communication Objective, and Main Messages**

- Who is your primary audience?
- What is your primary communication objective? *A communication objective is what you want your audience to think, feel, or do after they receive the message or material.*
- What is the main message statement? *The main message statement is the one thing the audience must remember. The statement may be 1–3 short sentences.*
- What strategies are you taking to ensure the content is easily understandable and culturally relevant for your audience?
- What CDC guidance will you use to develop the product (e.g., website, publications, guidance document, surveillance data, research)? Please provide relevant links.
- Will your product incorporate scientific or technical information from sources outside of CDC? If so, please explain.

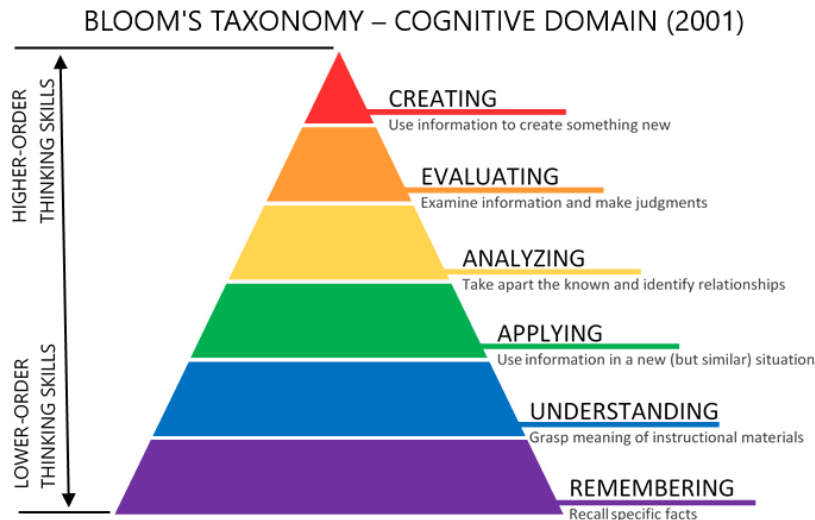
Dissemination

- How will the product be shared with your primary audience? (e.g., via a website, on a podcast platform, via a Zoom webinar)
- When is your ideal timeline for dissemination? (Please include any proposed deadlines, including presentation dates, campaign launches, etc.)
- Who will help disseminate the information? Please note if you would like to help CDC to help promote your product or event.

Methodology and Learning Objectives

- **Methodology**

- Using the Blooms taxonomy framework to have participants apply infection control actions and understand the “why” behind those actions



- **Stations and Learning Objectives**

1. **Hand hygiene (Utah)**- Defining hand hygiene and properly demonstrating the correct steps of hand hygiene.
2. **Source control (New York)**- Defining source control and learning how respiratory droplets spread.
3. **Personal protective equipment (New Jersey)**- Articulating and demonstrating how to correctly don and doff PPE.
4. **Cleaning and disinfection (Wyoming)**- Recognizing how to identify contact time on a disinfectant label as well as identify high touch areas in healthcare facilities.

The Project Firstline Escape Room Manual

- Includes the following:
 - Supply checklist for each station
 - Figures/images/clues for each station
 - Facilitator guide and script
 - “Quick Tips” sheet for participants



Escape Room Stations

- Station 1
 - Hand Hygiene
- Station 2
 - Source Control
- Station 3
 - PPE
- Station 4
 - Cleaning and Disinfection



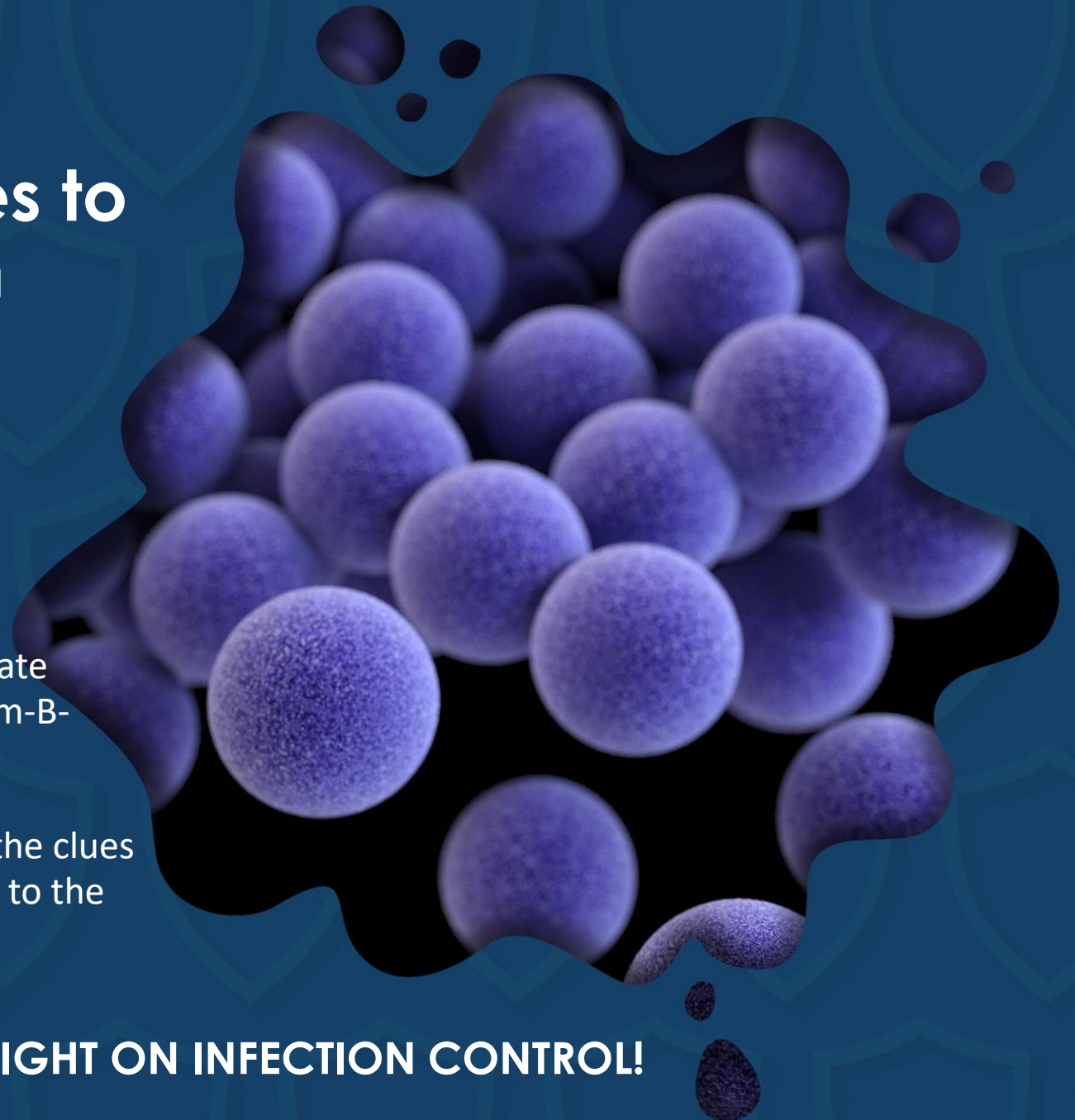
**Do you have what it takes to
unlock the clues at each
station?**

It is all up to you!

TEAM INSTRUCTIONS:

In teams of 5-6 people will have 30 minutes to navigate Clutterbug's clever traps and unite with Captain Germ-B-Gone to proclaim victory.

The group must work together as a team to answer the clues at each station, win a puzzle piece before moving on to the next station.



The PFL Escape Room Experience INTRODUCTION VIDEO



HAND HYGIENE STATION 1

Objective 1:

- Participants will be able to define hand hygiene
- Reasons why hand hygiene is important
- Both hand washing and using alcohol-based hand sanitizer

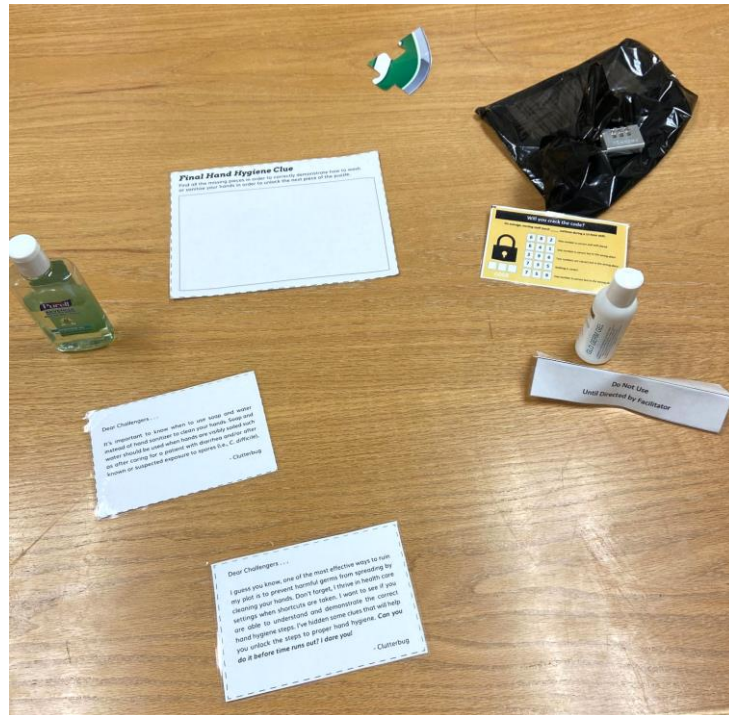
Objective 2:

- Participants will be able to demonstrate the correct steps of hand hygiene
- Correct steps are provided as a clue
- Practical demonstration within the escape room is required to progress



HAND HYGIENE STATION 1

Solving Station



Will you crack the code?

On average, nursing staff touch ____ surfaces during a 12-hour shift.

6	8	2	One number is correct and well placed
6	4	1	One number is correct but in the wrong place
2	9	6	Two numbers are correct but in the wrong place
7	3	5	Nothing is correct
7	5	9	One number is correct but in the wrong place

CODE

Final Hand Hygiene Clue

Find all the missing pieces in order to correctly demonstrate how to wash or sanitize your hands in order to unlock the next piece of the puzzle.

Steps to Wash Your Hands:

- Wet your hands with clean, running water (warm or cold), and apply soap.
- Lather your hands by rubbing them together with soap, lather the backs of your hands, between your fingers, and under your nails.
- Scrub your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
- Rinse your hands well under clean, running water.
- Dry your hands using a clean towel.
- Using your elbows or the paper towel, turn off the tap water.

Steps to Use Hand Sanitizer

- Apply the gel product to the palm of one hand (read the label to learn the correct amount).
- Rub your hands together.
- Rub the gel over all the surfaces of your hands and fingers until your hands are dry. This should take around 20 seconds.

Sanitizers can Quickly Reduce the Number of Germs on Hands in Many Situations. However,

- Sanitizers do not get rid of all types of germs.
- Hand sanitizers won't be as effective when hands are visibly dirty or greasy.
- Hand sanitizers won't remove harmful chemicals from hands like pesticides and heavy metals.

Congratulations! You've outwitted Mr. Clutterbug. You must now choose one brave hero to demonstrate correctly cleaning their hands. If you correctly complete the task, you may move on the next leg of your journey.

Dear Challengers . . .

It's important to know when to use soap and water instead of hand sanitizer to clean your hands. Soap and water should be used when hands are visibly soiled such as after caring for a patient with diarrhea and/or after known or suspected exposure to spores (i.e., C. diff).

-Clutterbug

SOURCE CONTROL STATION 2



Objective 1:

- Participants can define source control through key infection control actions

Objective 2:

- Participants will learn how respiratory droplets spread

This station emphasizes the importance of proper source control and the spread of respiratory droplets. “We don’t always know who is infected”.

“If your mask is ill-fitting and doesn’t cover your nose and mouth, you can breathe in viruses and things can go south. Don’t make that mistake at station two or I’ll be there to get you and you won’t make it through!”

-Clutterbug



SOURCE CONTROL STATION 2



**Respiratory droplets
can enter through your
nose, throat, lungs, and
eyes.
You have the power to
STOP
germs from spreading
at the source.**



PERSONAL PROTECTIVE EQUIPMENT (PPE) STATION 3



Objective:

- **Participants will be able to explain and demonstrate how to safely don and doff PPE**

This station was created with the intention for the exercise to be modified should resources be limited

Examples include:

- Using a mannequin
- Tabletop exercise of arranging PPE in the proper donning and doffing sequence

After successfully completing of the donning/doffing exercise, a riddle is read to the group. The answer to the riddle is the lock code to unlock the lock box with the third puzzle piece to be able to advance to the final station.

PPE STATION 3



CLEANING AND DISINFECTION STATION 4



INSTRUCTIONS GRAND FINALE

YOU THOUGHT YOU WERE FINISHED?

It turns out you are missing the most important piece!

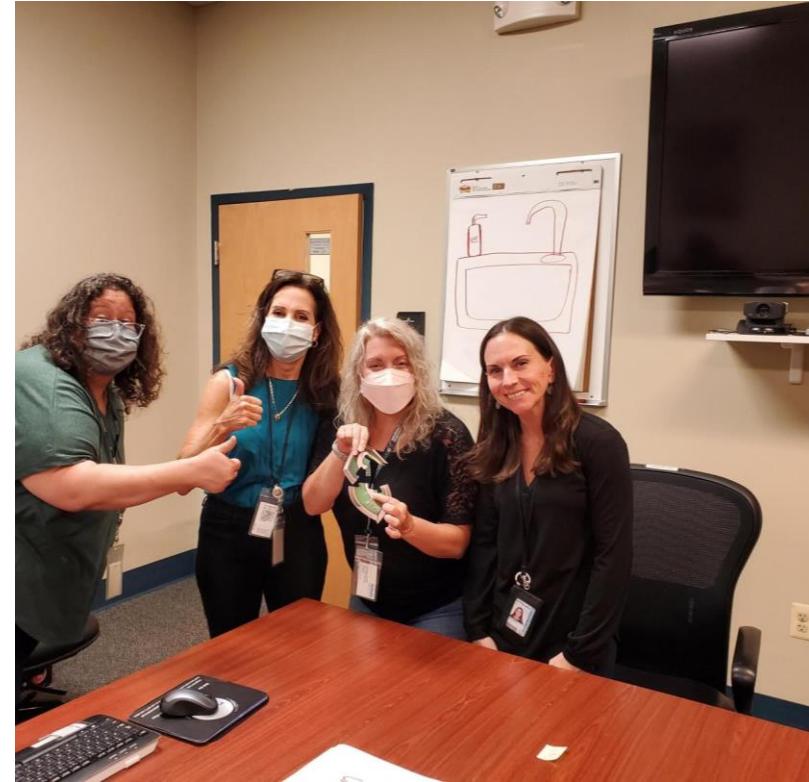
Everyone plays a PART in infection control.

Put your puzzle together.

Who is the most important thing that is missing?



Escape Room Test Run at NJDOH



Implementation of the Project Firstline Escape Room

TRAINING ENVIRONMENT

- **Nursing Homes**
- **Universities**
- **Community Colleges**
- **Public Health**
- **Federally Qualified Health**

Centers

- **Tribal Health**
- **Assisted Living**
- **Home Health**
- **Hospice Companies**
- **Community Health Worker**

Programs

DATA & FEEDBACK

New Jersey:

- Since 2021 to current (April 2024), the NJDOH PFL team facilitated 18 Escape Rooms with 343 participants.
- The total number of those that attended and completed a pre and post-test was 144 participants.
 - An overall 44.3% completion rate.

“Great learning experience”

“A fun way to incorporate training on infection control”

“Great instructors and a lot of fun”

DATA & FEEDBACK

New Jersey:

- Training Evaluation
 - 98.4% of participants would recommend this training to a friend or colleague.
 - 94.5% indicated a high to moderately high satisfaction with their learning experience during the escape room.
 - 92.9% indicated that they intend to implement the training they received from their experience.
 - 38.2% increase in self-efficacy in knowledge and understanding of infection prevention control after the escape room training.
- Pre & Post-Test Knowledge
 - 13.7% average knowledge gained across aggregated completed and matched pre and post tests.

“Great learning experience”

“A fun way to incorporate training on infection control”

“Great instructors and a lot of fun”

We're Published!

HEJ

Original Article

Engage, educate, escape: The New Jersey Department of Health Project Firstline Escape Room

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Improvement Strategies

Improvement Strategies

- Improve the station prompts to be more self-lead/ self-paced.
- Create a virtual Escape Room to increase access to healthcare providers and healthcare students.
- More promotion of the Escape Room.
- Provide the Escape Room to healthcare and public health workers at healthcare and public health agencies.
- Train internal staff to be co-facilitators (ICAR Teams).
- A la carte station selections for tabling's at events.
- Translation of the escape room manual.

Other IPC Education and Communication Tools

Social Media in Infection Control Education and Communication

- A required deliverable of our grant work (SHARP 1 – Project V – Activity B3)
 - Communicate with frontline healthcare workers about HAI threats.
 - Use existing PFL and health department dissemination channels (trainings, partners, **social media**, town halls, **promotional campaigns**, etc.) to communicate with frontline healthcare workers about local HAI threats...keeping in mind actions specific to certain health care professions and settings.

Social Media in Infection Control Education and Communication

- Weekly PFL posts on social media
 - Promoting trainings (virtual, asynchronous)
 - Promoting a new health education product
 - General IPC education
- IPC Tips of the Week Campaign

Social Media in Infection Control Education and Communication

- Partnership with NJDOH Office of Communications
 - Oversight and management of NJDOH social media accounts:
 - Facebook (93,000 followers)
 - Instagram (23,100 followers)
 - LinkedIn (18,000 followers)
 - Threads (4,400 followers)
 - X/Twitter (44,400 followers)

NJDOH PFL Social Media Aggregate Data

- Since 2021 to current (April 2024), the NJDOH PFL team in collaboration with the Office of Communications posted **963 posts** about various topics ranging from IPC Tip of the Week, general PFL promotion, learning needs assessment (LNA), virus spread, handwashing, etc. across the Facebook, Instagram, Threads, LinkedIn, and X/Twitter.
 - Out of the 963 posts, we have **629 posts that are unique and not duplicated** (does not include posting the same post on multiple platforms).



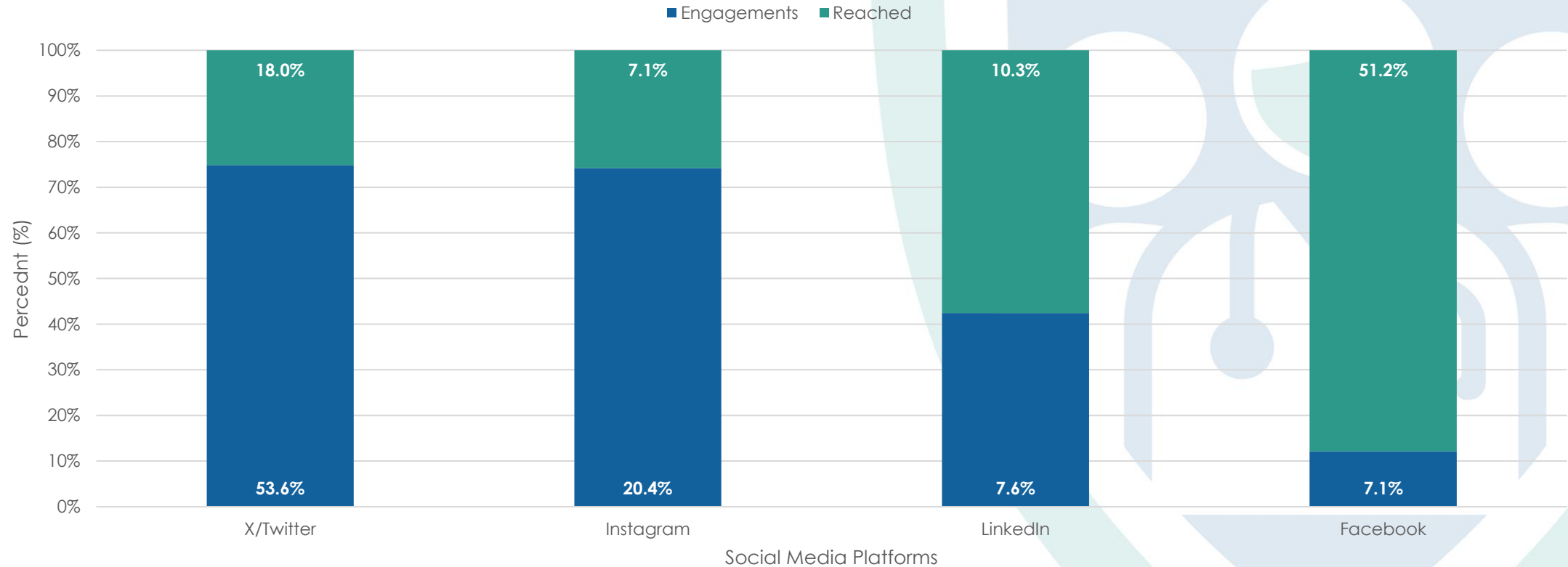
NJDOH Social Media Aggregate Data

- **Reached 1,416,181 users across all platforms in June 2023**
 - 132,771 total engagements
 - 7,453 total reactions
 - 795 total shares/retweets
 - 590 comments/replies
- Facebook and X/Twitter are the best performing platforms with a reach of 834,775 and 228,428 users, respectively.
- However, in terms of active engagement, Instagram with 197 posts accumulated 31,013 total engagements.

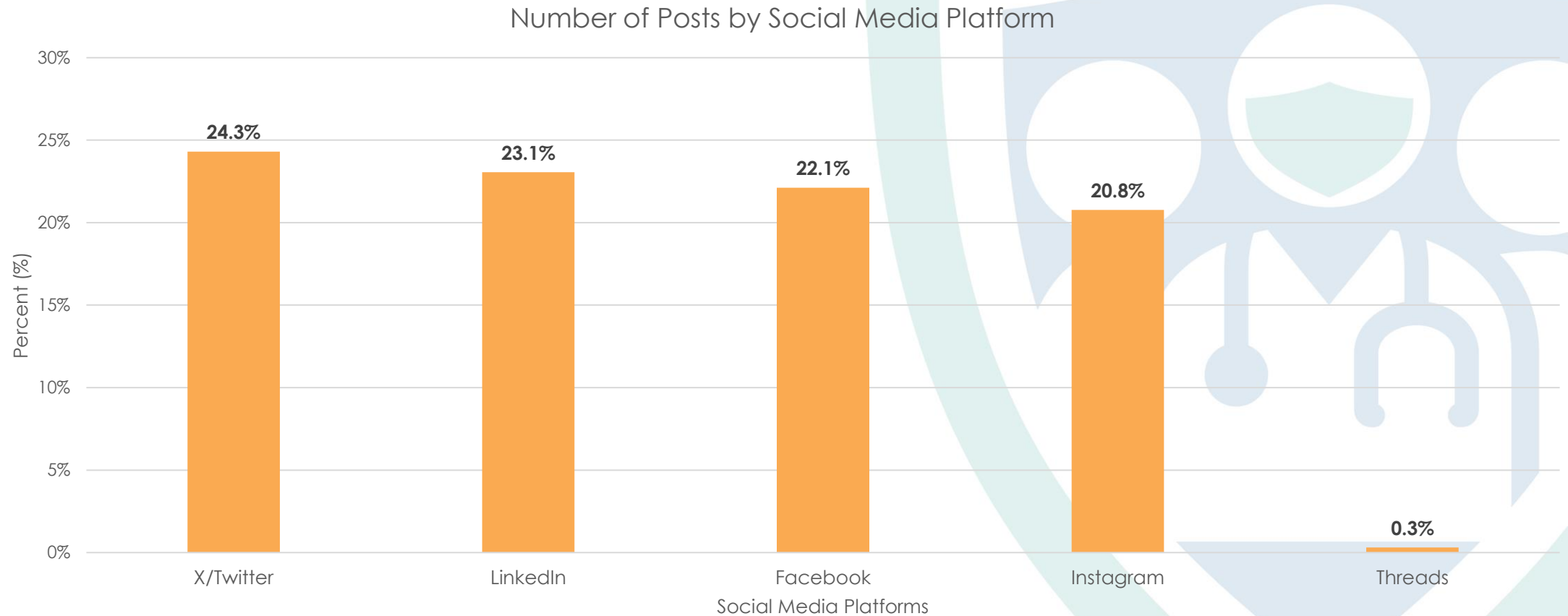


NJDOH Social Media Metrics Continued...

Total Number of Engagements and Users Reached by Social Media Platform



NJDOH PFL Social Media Metrics



IPC Tips of the Week

- Campaign started in 2021
- Tips have a monthly theme related to IPC and are posted on all social media platforms.
- Goal is to provide brief, concise IPC education to healthcare workers while also educating the public.
- Expanding beyond providing tips but also including “Did You Know?” information.

**INFECTION PREVENTION AND CONTROL (IPC)
TIP OF THE WEEK**

DID YOU KNOW?
**NJDOH COMMUNICABLE DISEASE
SERVICE HAS A TEAM DEDICATED TO
THE PREVENTION AND CONTAINMENT OF
HEALTHCARE-ASSOCIATED INFECTIONS?**

OCDS
New Jersey Department of Health

NJ Health
New Jersey Department of Health

PROJECT FIRSTLINE
CDC's National Training Collaborative
for Healthcare Infection Control

**INFECTION CONTROL
ASSESSMENT &
RESPONSE**
NEW JERSEY DEPARTMENT OF HEALTH

IPC Tip of the Week Aggregate Data

- Since 2021 to current (April 2024), the NJDOH PFL team in collaboration with the Office of Communications posted 421 posts about IPC Tip of the Week – currently at the 124th Tip.



CALLING ALL Infection Preventionists

Leave a Comment

- What field do you work in?
 - a. Long term care
 - b. Agency
 - c. Clinic
 - d. Hospital
 - e. Government/State/Other
- Name 1 thing you enjoy about being an infection preventionist.



IPC Tip of the Week Aggregate Data

- Reached over 532,407 users across all platforms:
 - 27,964 total engagements
 - 1,725 total reactions
 - 190 total shares/retweets
 - 158 comments/replies
- The best performing tip by:
 - Number of individuals reached was Tip #24 on Facebook with 20,392 users.
 - Number of engagements was Tip #26 on X/Twitter with 1,588 total number of engagements.
- Overall platform performance:
 - Facebook had the highest reached with 272,725 users (78 posts).
 - X/Twitter has the highest engagement with 15,000 (101 posts).

**INFECTION PREVENTION AND CONTROL (IPC)
TIP OF THE WEEK FOR HEALTHCARE WORKERS**

Tip #24

Unsafe injection practices put patients and healthcare personnel at risk for disease transmission, including bacterial infections like MRSA or bloodborne pathogens like hepatitis C virus. Injection safety and other basic infection control practices are critical to patient safety. A good rule for healthcare providers to remember is:

One Needle, One Syringe, Only One Time.

Logos: OCDS, NJ Health, PROJECT FIRSTLINE, INFECTION CONTROL ASSESSMENT & RESPONSE

**INFECTION PREVENTION AND CONTROL (IPC)
TIP OF THE WEEK FOR HEALTHCARE WORKERS**

Tip #26

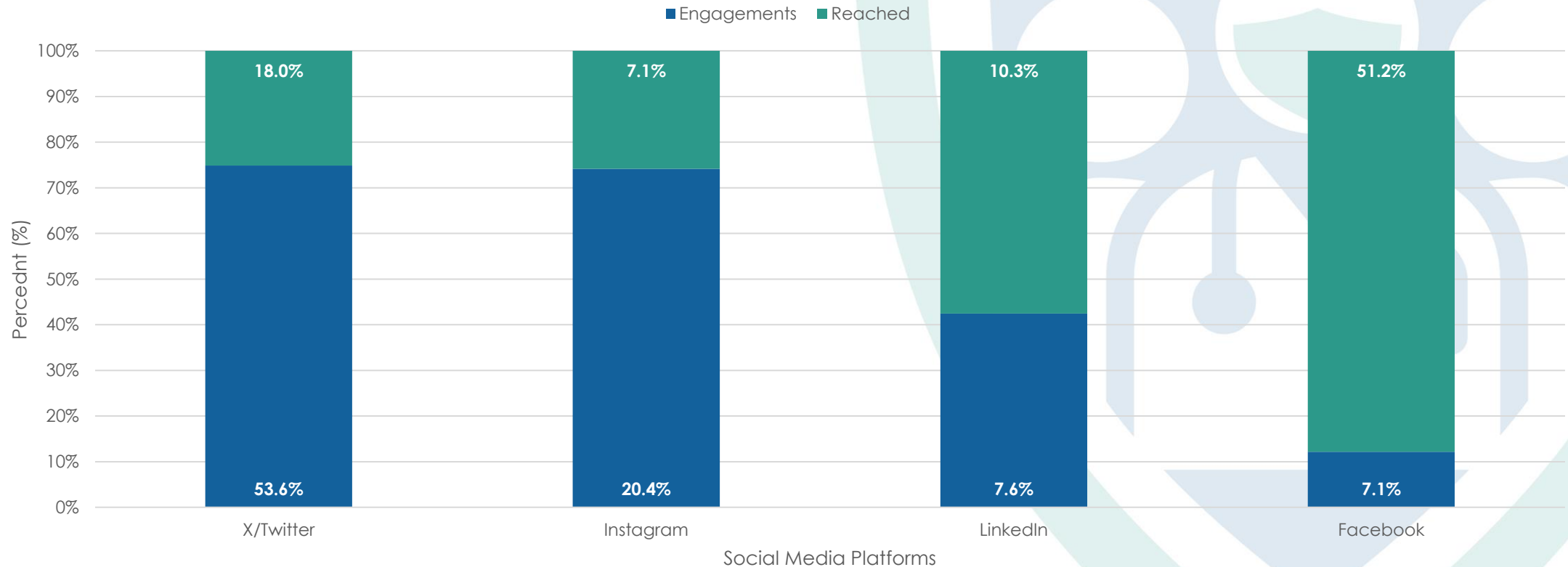
When preparing or administering injections, healthcare providers must **ALWAYS** use aseptic technique to avoid contamination of sterile injection equipment and prevent the transmission of pathogens.

Proper hand hygiene should be performed before handling medications and the rubber septum should be disinfected with alcohol prior to piercing it.

Logos: OCDS, NJ Health, PROJECT FIRSTLINE, INFECTION CONTROL ASSESSMENT & RESPONSE

IPC Tip of the Week Aggregate Data Continued...

Total Number of Engagements and Users Reached by Social Media Platform

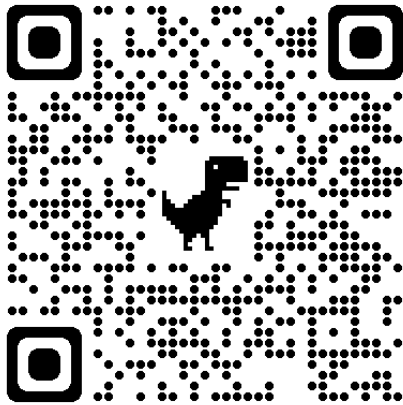


Conclusion

- The efficacy and impact of unique health education training tools have consistently proven to enhance participant learning outcomes and evolving traditional teaching approaches.
- Social media platforms can serve as potential vehicles for disseminating concise and targeted infection control education to healthcare professionals.
- By leveraging the immediacy and widespread reach of social media, it enables swift dissemination of vital information, empowering healthcare workers to stay abreast of evolving best practices and safeguarding patient well-being.



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Contact Us

Is your facility interested in infection prevention and control training and/or partnering with Project Firstline? Contact us!

- Call 609-826-5964
- E-mail CDS.IC.PFL@doh.nj.gov
- Complete online intake form

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Stay up to date with Project

Project Firstline

The New Jersey Department of Health (NJDOH) Communicable Disease Service (CDS) is collaborating with the Centers for Disease Control and Prevention's (CDC's) Project Firstline, a national initiative designed to provide trainings and additional education and tools regarding infection prevention and control practices to frontline healthcare workers. The goal is to provide foundational knowledge of infection prevention and control measures and emphasize the importance of implementing these protocols throughout the workday to ensure best practice in healthcare settings. This initiative aims to help every healthcare worker gain confidence to apply infection prevention and control principles in their work setting to protect themselves, their patients and the community from infectious disease threats.

Training and educational tools and resources will be provided to healthcare workers based on practices that prevent the spread of infectious disease, including hand hygiene, use of personal protective equipment (PPE), environmental cleaning and more.

For more information on Project Firstline, please visit the [CDC website](#).

For more information on healthcare-associated infections, please visit the [NJDOH website](#).

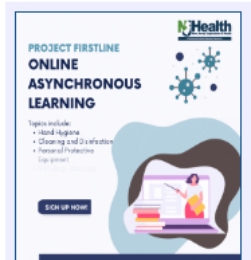
Upcoming Trainings

Project Firstline: NJ College Tour Resources

The goal of this initiative is to reach the future healthcare and allied health workforce to start their careers with the infection control knowledge to keep themselves and their patients safe. Click on the links below if you want to learn more about how you can co-host or hear about past students' infection control experiences!

- [Fall 2022 Subject Matter Expert Interviews](#)
- [Spring 2022 Student Spotlights](#)
- [Project Firstline: New Jersey College Tour Co-Host](#)

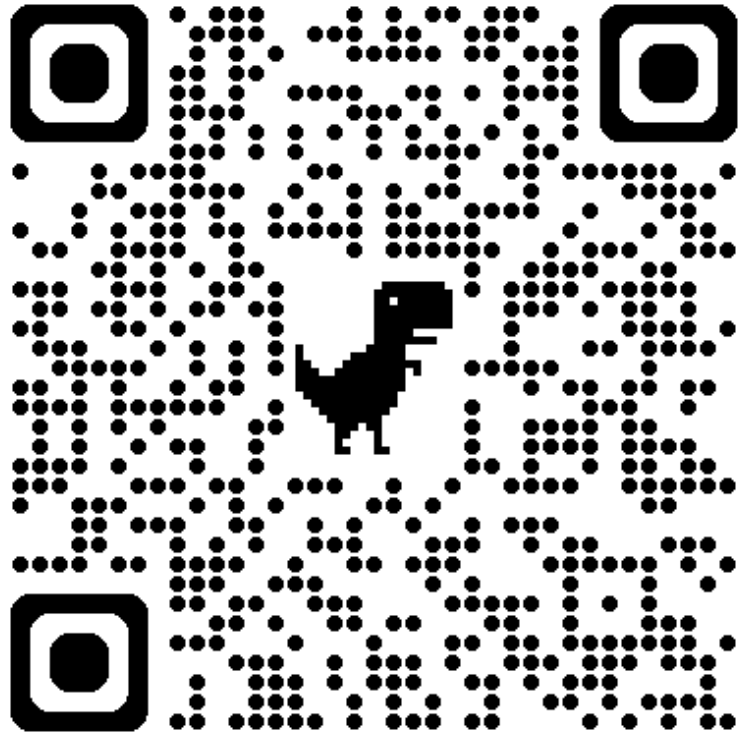
Project Firstline Asynchronous Trainings



The NJDOH Project Firstline team has launched their own learning management system for frontline health care workers and health care students to participate in asynchronous learning on general infection control topics. Register [here](#) to access the online trainings now!

Project Firstline Escape Room

Scan the QR Code to Register to Download a Copy of the Project Firstline Escape Room Manual



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@NJDeptofHealth



Thank you!

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