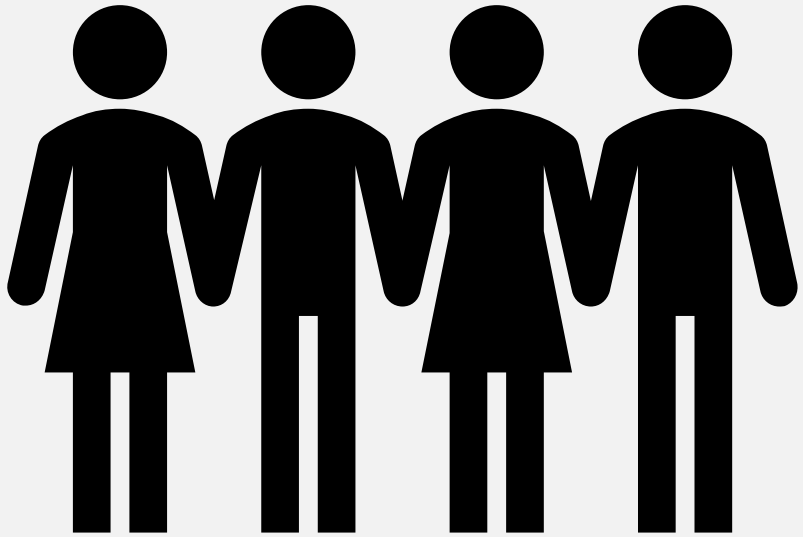
TEXAS
Health and Human Services

Texas Department of State Health Services

Basics in Infection Prevention

Healthcare Safety Unit

Healthcare Safety Unit



Mission

Promoting safe and quality healthcare through awareness, education, transparency, monitoring and response.

Vision

Helping to achieve safe, quality healthcare that improves the well-being of everyone in Texas.

Objectives

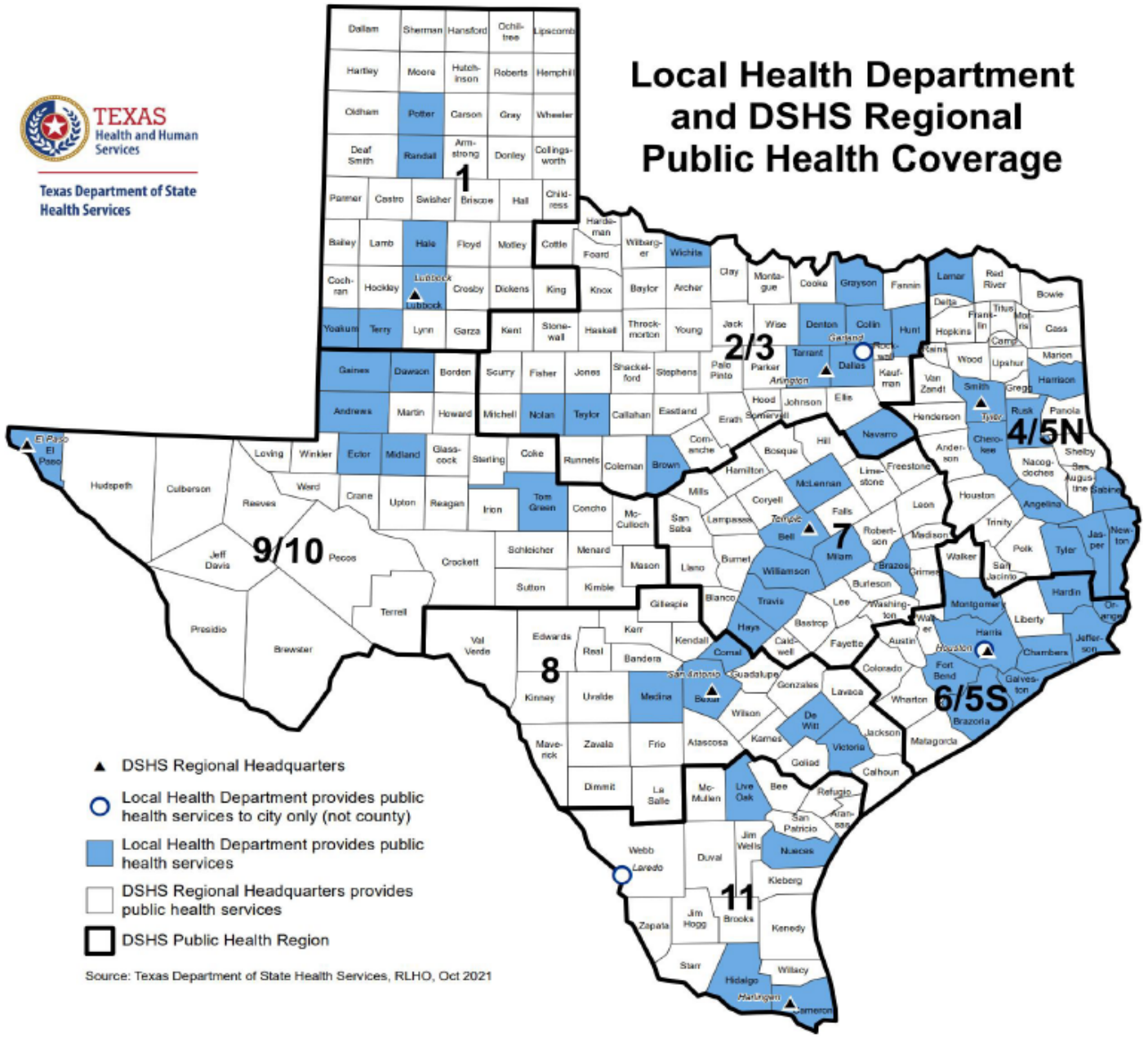
- Describe the role of Infection Preventionists (IPs) in healthcare settings.
- Identify basic concepts of infectious disease/emerging infections.
- Understand the principles of preventing healthcare-associated infections (HAI).
- Explain the steps that are unique to controlling HAI outbreaks.

Infection Control

HAI Epidemiologists

- Provide infection prevention and control guidance
- Respond and assist during outbreaks
- Conduct infection control assessments
- Assist local health departments as needed

Texas Healthcare Associated Infections (HAI) Epidemiologists



Healthcare Safety Investigation Group Manager
Enyinnaya N. Merengwa, MD, DrPH, MHA, MPH
Enyinnaya.Merengwa@dshs.texas.gov
(512) 776-6878
(512) 634-6558 (cell)

Gillian Blackwell, PHR 1
Gillian.Blackwell@dshs.texas.gov
(512) 496-7463 (cell)

Thi Dang, PHR 2/3
Thi.Dang@dshs.texas.gov
(817) 291-7127 (cell)

Vacant, PHR 2/3 Epi II

Annie Nutt, PHR 4/5N
Anna.Nutt@dshs.texas.gov
(512) 247-1729 (cell)

Bobbiejean Garcia, PHR 6/5S
Bobbiejean.Garcia@dshs.texas.gov
(832) 728-4741 (cell)

Vacant, PHR 6/5S Epi II

Vacant, PHR 7 III

Gretchen Rodriguez, PHR 8
Gretchen.Rodriguez@dshs.texas.gov
(512) 221-8046 (cell)

Cynthia Williams, PHR 8
Cynthia.Willams1@dshs.texas.gov
(210) 448-8436 (cell)

Vacant, PHR 9/10

Angel Guevara, PHR 11
Angel.Guevara@dshs.texas.gov
(512) 221-6183 (cell)

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Healthcare-Associated Infections

Healthcare-Associated Infections (HAIs) are infections that patients develop during the course of receiving treatment for other conditions at a healthcare facility.

687K

people in the US develop infections during a hospital stay

1 in every 31 patients

72K

people die each year as a result of hospital infections

https://www.cdc.gov/hai/data/portal/index.html

Infection Control in Perspective

https://www.youtube.com/watch?v=LraFWGyfavY

Most common types of HAIs

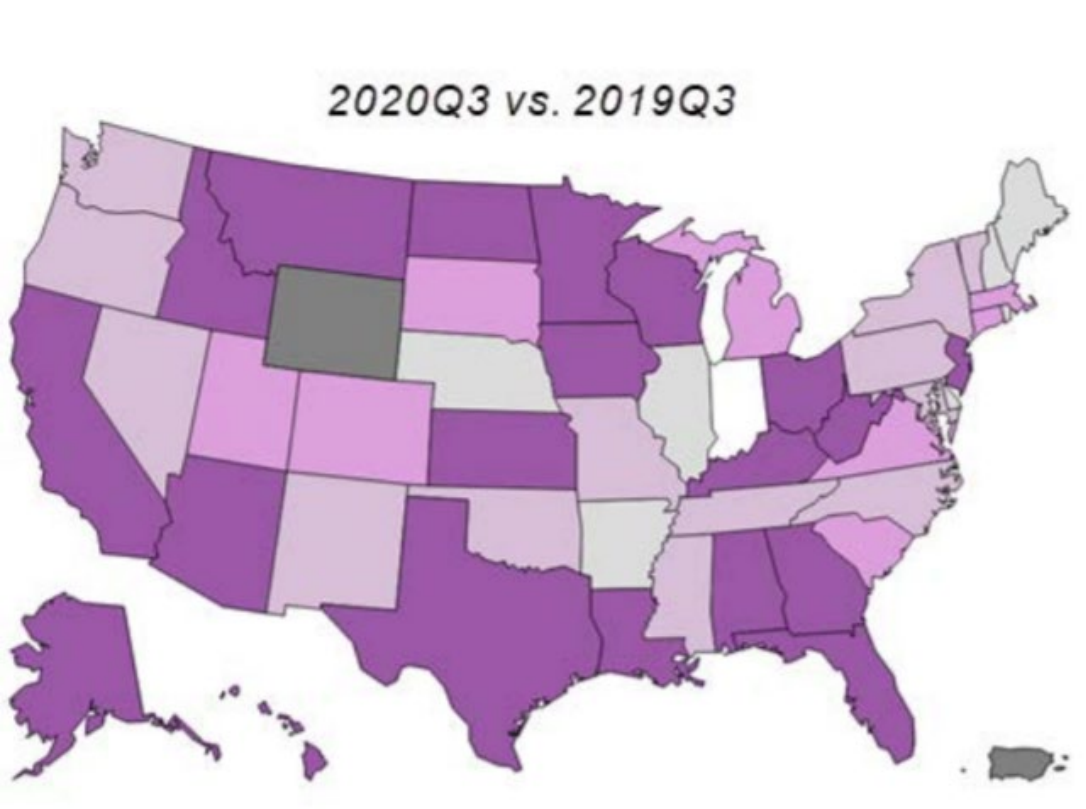
HAI Estimates Occurring in US Acute Care Hospitals, 2019

Major Site of Infection	Estimated No	Percent of Change
Central Line-Associated Blood Stream Infection	18,009	31%↓
Cather-Associated Urinary Tract Infection	19,398	26%↓
Ventilator-Associated Event	24,724	3%↓
Methicillin-resistant Staphylococcus aureus	8,131	18%↓
Surgical Site Infections (Abdominal Hysterectomy)	2,157	2% No Change
Surgical Site Infections (Colon Surgery)	7,256	15%↓
C. difficile	159,463	42%↓

https://www.cdc.gov/nhsn/datastat/progress-report.html#anchor_1631556713795

How COVID-19 affected HAIs

Percent Change in CLABSI SIRs, by state: 2020 vs 2019



- Significant increases in 2020 for CLABSI, CAUTI, VAE, and MRSA compared to 2019
- Ventilator utilization increased by 25 – 31% in 2020

https://www.cdc.gov/hai/data/portal/covid-impact-hai.html

Healthcare Settings

- Acute care hospitals
- Long-term care facilities
- Long-term acute care hospitals
- Inpatient rehabilitation facilities
- Ambulatory surgery centers
- Outpatient clinics
- Urgent care/freestanding emergency rooms
- Dialysis settings
- Blood banks/plasma donation centers
- Birthing centers
- And more!

Infection Control Program

Policies and Procedures	• *Standard and Transmission based precautions* • *Cleaning, disinfection, and sterilization* • *Occupational health* • *Hand hygiene*
IC Plan & Risk Assessment	• *Reviewed annually (and when standards change)* • *List measurable goal objectives* • *Plan of action to reduce risks for each goal*
Surveillance System	• *Daily review of lab cultures* • *Tracking organisms* • *Timely identification of infections and outbreaks*
IC Program Plans	• *TB Control Plan* • *Respiratory Protection Program* • *Bloodborne Pathogens Plan* • *Water Management Plan*
Antibiotic Stewardship Program	• *Incorporating the CDC's core elements for antibiotic stewardship*

Annual Risk Assessment and Plan

		SEVERITY = (MAGNITUDE - MITIGATION)						
EVENT	PROBABILITY	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	PREPARED-NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
	Likelihood this will occur	*Possibility of death or injury*	*Physical losses and damages*	*Interruption of services*	*Preplanning & Prevention*	*Time, effectiveness, resources*	*Community/ Mutual Aid staff and supplies*	*Relative threat**
Issue	*0 = N/A 1 = Low 2 = Moderate 3 = High*	*0 = N/A 1 = Low 2 = Moderate 3 = High*	*0 = N/A 1 = Low 2 = Moderate 3 = High*	*0 = N/A 1 = Low 2 = Moderate 3 = High*	*0 = N/A 1 = Low 2 = Moderate 3 = High*	*0 = N/A 1 = Low 2 = Moderate 3 = High*	*0 = N/A 1 = Low 2 = Moderate 3 = High*	*0 - 100%*
Device-related infection								
- Blood Stream Infection								
- Ventilator Associated Infection								
- Urinary Tract Infection								
- Implant from Surgical Procedure								
- Drain or Tube - Temporary								
- Ostomy or Related Opening								
- Peritoneal Dialysis								
- Shunt								
- Other								
Resistant Microbes								

ICRiskAssessmentAnalysis.xls (live.com)

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IC Training Competency and Implementation of Policies and Practices

- Hand Hygiene
- Personal Protective Equipment
- Injection Safety
- Antibiotic Stewardship
- Cleaning, Disinfection and Sterilization

Infection Prevention Training Courses

- Certification Board of Infection Control and Epidemiology: https://www.cbic.org/
- SHEA Online Learning Center: https://learningce.shea-online.org/
- APIC Education & Certification: https://apic.org/Education-and-Events/Overview
- TSICP Education: http://www.tsicp.org/
- CDC Webinar Series: https://www.cdc.gov/infectioncontrol/training/index.html

HHSC Adopts Infection Control Training Requirements

- **Nurse Aides**
  - TAC Chapter 554 adds infection prevention and control training to annual in-service training for nurse aides effective Jan 2nd, 2022.
  - TAC Chapter 556 requires all nurse aides to complete a course in infection control each year effective Aug 8th, 2021.
- **Nursing Facility Administrators**
  - TAC Chapter 555 requires all admin to complete a course in infection control and PPE each year. Admins in training must complete the course as part of their internship effective Nov. 14th, 2021
- **CMS Recommends Targeted COVID-19 Training**

Pause for a Poll

What is Project Firstline?

https://www.cdc.gov/infectioncontrol/projectfirstline/resources/videos.html

Project Firstline

New Videos on Recognizing Infection Risks

https://www.cdc.gov/infectioncontrol/projectfirstline/healthcare.html

Project Firstline

Facilitator Training Toolkits

Recognizing Risk Using Reservoirs Training Toolkit

Session 1:
What Does it Mean to Recognize A Risk?

Session Plan: Recognizing Risk [PDF – 18 Pages]

Slide Set: Recognizing Risk [PPT – 22 Slides]

Participant Booklet: Recognizing Risk [PDF – 4 Pages]

Session 2:
How Germs Make People Sick

Session Plan: How Germs Make People Sick [PDF – 21 Pages]

Slide Set: How Germs Make People Sick [PPT – 25 Slides]

Participant Booklet: How Germs Make People Sick [PDF – 4 Pages]

Session 3:
Recognizing Risk Using Reservoirs: A Review

Session Plan: Recognizing Risk Review [PDF – 20 Pages]

Slide Set: Recognizing Risk Review [PPT – 22 Slides]

Participant Booklet: Recognizing Risk Review [PDF – 4 Pages]

Introduction to Reservoirs: Where Germs Live Training Toolkit

Session 1:
Body Reservoirs

Session Plan: Body Reservoirs [PDF – 24 Pages]

Slide Set: Body Reservoirs [PPT – 21 Slides]

Participant Booklet: Body Reservoirs [PDF – 8 Pages]

Session 2:
Healthcare Environment Reservoirs

Session Plan: Environment Reservoirs [PDF – 21 Pages]

Slide Set: Environment Reservoirs [PPT – 20 Slides]

Participant Booklet: Environment Reservoirs [PDF – 8 Pages]

Session 3:
Body and Healthcare Environment Reservoirs: Synthesis

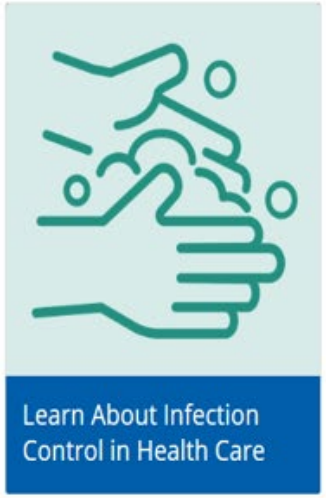
Session Plan: Reservoirs Synthesis [PDF – 15 Pages]

Slide Set: Reservoirs Synthesis [PPT – 16 Slides]

Participant Booklet: Reservoirs Synthesis [PDF – 5 Pages]

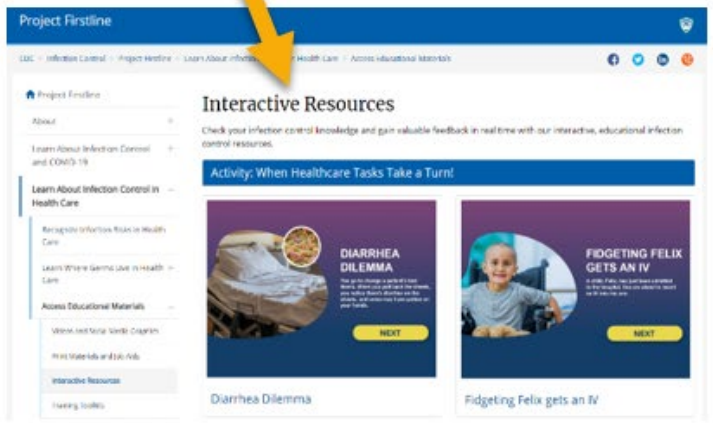
https://www.cdc.gov/infectioncontrol/projectfirstline/healthcare/training.html

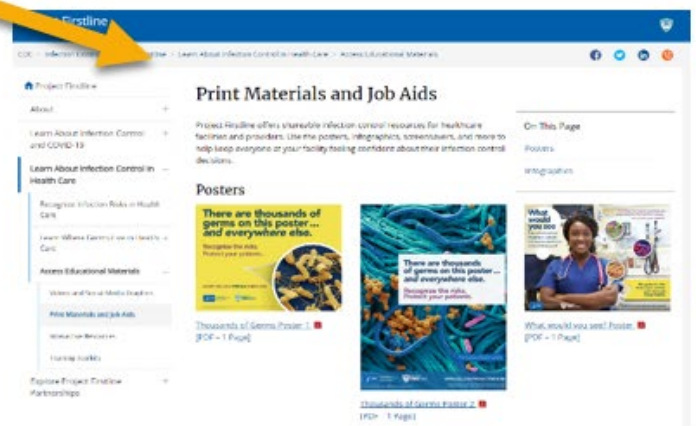
Project Firstline



From this page you have access to posters and infographics that can be printed and displayed in your facility or used digitally.

Interactive resources let you check your or your staff's infection prevention knowledge!





Project Firstline

- Earn continuing education with on demand video series
  - Certificate of completion
  - Continuing education credit
- Watch from your smartphone or other electronic device!

Infection Control Education

https://www.dshs.state.tx.us/IDCU/health/Healthcare-Safety-Training.aspx

Past Trainings

Part I: Basics in Infection Prevention and Control for LHD Epidemiologists
October 19th, 2021
October 21st, 2021

TSICP Infection Control Essentials
February 10th-11th, 2022

TSICP CIC Exam Prep Course
March 10th-11th, 2022

Part 2: Conducting an Infection Control Assessment (ICAR) in a Healthcare Setting
February 24, 2022
April 5, 2022

Upcoming Trainings

Part 3 in IPC Series

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Infection Control

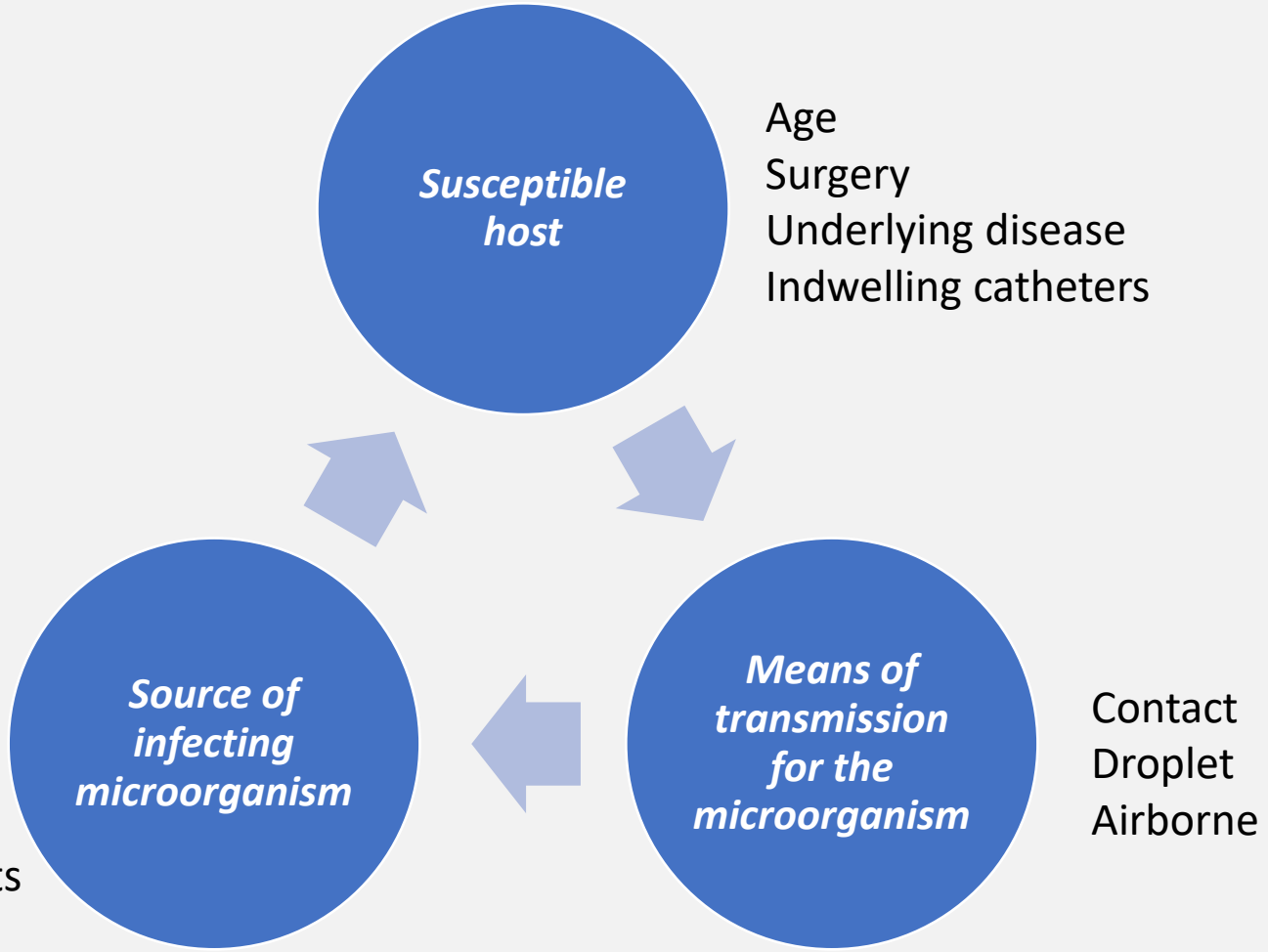
- Works
- Is a Team Effort
- Matters

Access CDC Project Firstline's site directly from your smartphone and watch infection prevention and control videos on the go!

Use your smartphone's camera to scan the code!

Standard and Transmission Based Precautions

How Do Infections Occur?



How can we prevent infections?

Standard Precautions

- Applies to all individuals regardless of infection status
- Includes
  - Hand hygiene
  - Personal protective equipment
  - Waste/sharp disposal
  - Safe injection practices
  - Respiratory hygiene

Transmission-Based Precautions

- “Isolation precautions”
- Designed for individuals who have or are suspected to have transmissible infections that require additional precautions

The single most important measure to reduce the risk of infection is:

HAND HYGIENE

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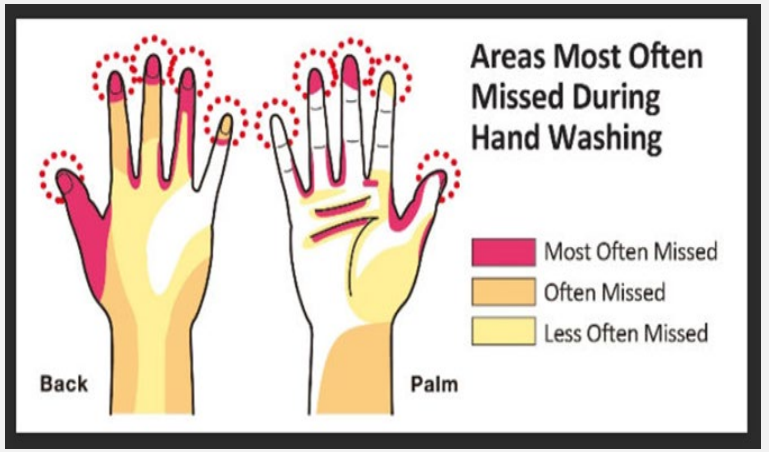
Hand Hygiene

- Train all staff on hand hygiene at hire, when job functions change and at least annually.
  - Personnel should:
    - Display knowledge of the indications or “moments” to perform hand hygiene, and
    - Demonstrate appropriate hand hygiene technique

Routine training and competency validation, audits for adherence, and process for feedback and improvement.

Hand Hygiene

- **Alcohol-based hand rub (ABHR)**
  - Preferred method for hand hygiene except:
    - Hands are visibly soiled
    - After care of patient with *C.difficile* or norovirus
    - After using the restroom
    - Before eating or drinking
- **Use soap and water when any of the above criteria are met**



Hand Hygiene Techniques

Handrubs

- Apply to palm of one hand, rub hands together covering all surfaces until dry
- Volume: based on manufacturer

Handwashing

- Wet hands with water, apply soap, rub hands together for at least 20 seconds
- Rinse and dry with disposable towel
- Use towel to turn off faucet

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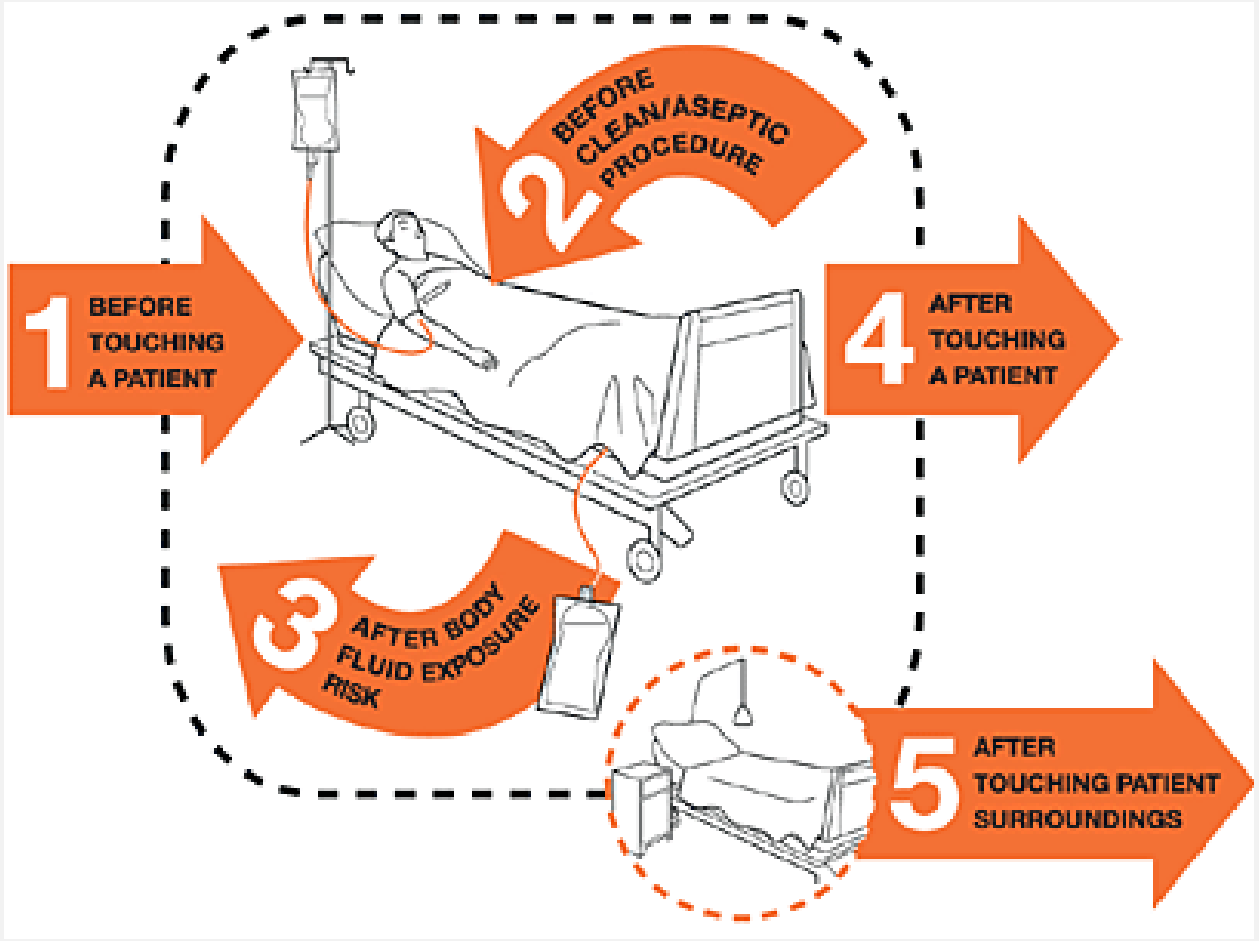
WHO 5 moments in Hand Hygiene



Don’t Forget About Patients and Visitors…

- Hand hygiene is also important for all <u>patients and visitors:</u>
  - Before entering and after exiting their rooms.
  - Before and after activities that require contact. within other patients/residents or with games.
  - Before and after meals.
  - After toileting.

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Barriers to Effective Hand Hygiene

- Staff preferences or habits
  - Using unapproved products
  - Not washing thoroughly
  - Not allowing ABHR to dry
  - Not performing hand hygiene when appropriate

Barriers to Effective Hand Hygiene

- Limited access to ABHR dispensers
  - Usually located outside resident rooms
  - Insufficient number of dispensers
  - Insufficient supply of personal ABHR
  - Resident safety
  - Hanging wall mounted dispensers too high
- Limited access to hand washing sinks

Barriers to Effective Hand Hygiene

- Excessively Long Nails
- Artificial Nails
- Jewelry

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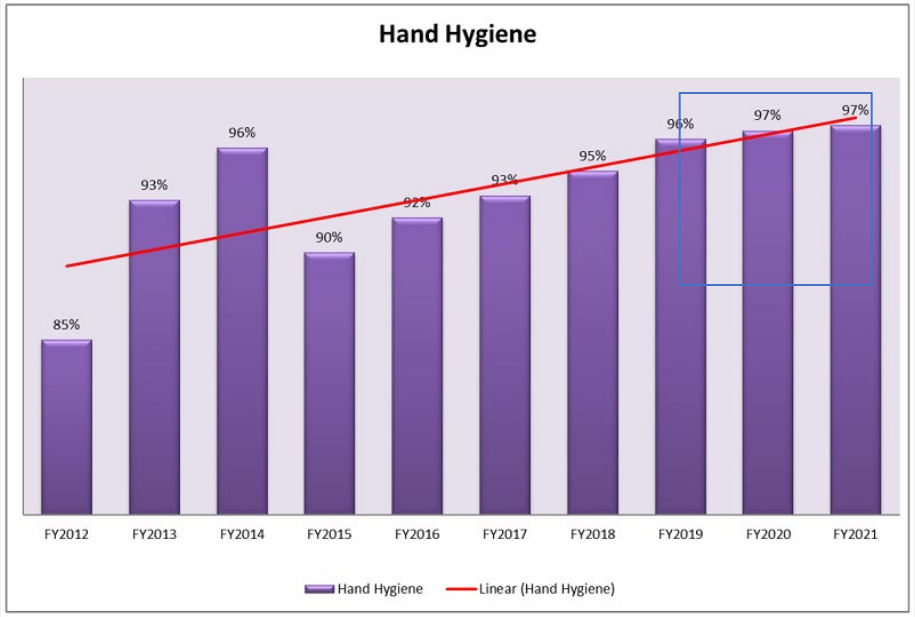
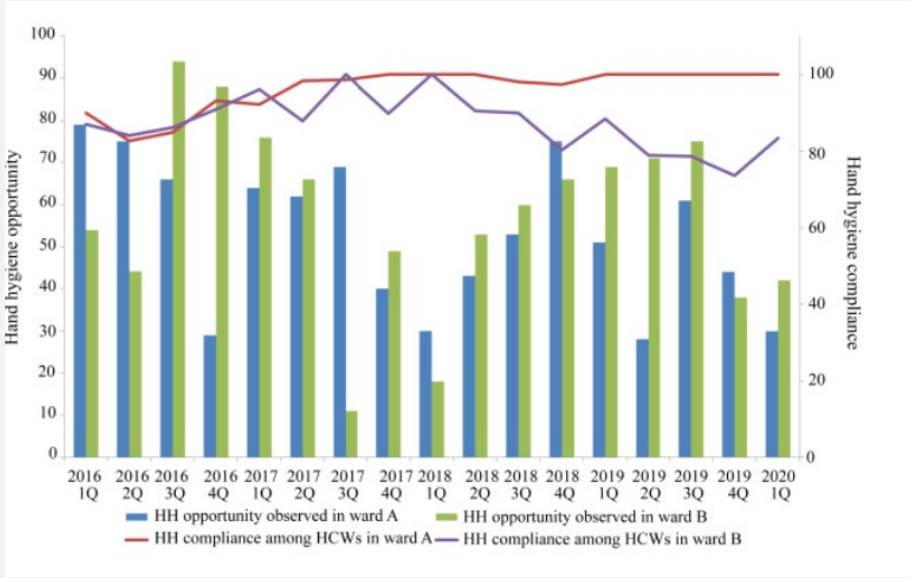
Direct Observation for Hand Hygiene

- Covert observation, “secret shoppers”
  - Training and standardized tools are necessary
  - Mobile handheld device for data collection
- Technology assisted
  - Video monitoring later reviewed by trained auditors
  - Automated systems with wearable devices
  - Eliminates selection and observer bias
  - Can provide just-in-time reminders

Hand Hygiene Data





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Pause for a Poll

Which of the following is NOT one of the most missed areas when washing your hands?

A. Thumbs

B. Fingertips

C. Palms

D. Between fingers

Types of Precautions

- **Contact** – spread by skin to skin contact or contact with contaminated surfaces.
  - Example: MDROs
  - *PPE: Gowns and gloves*

- **Droplet** – spread in large droplets by coughing, talking, or sneezing.
  - Example: Influenza
  - *PPE: Masks*

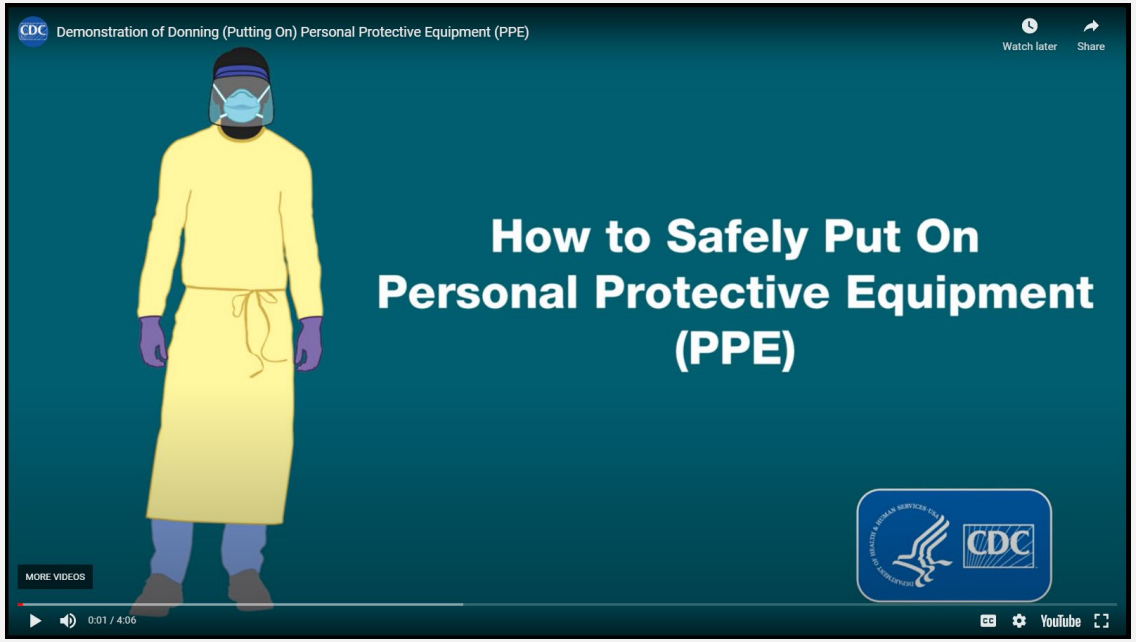
- **Airborne** – spread in small particles and remain suspended in the air.
  - Example: Tuberculosis.
  - *PPE: N-95 respirator*
  - *Special room:* Negative pressure

Personal Protective Equipment (PPE)

- **Anticipate exposure!**
- **Also use when patient/resident is on isolation precautions.**
- **Is the PPE in the facility easily available to the caregivers?**

Personal Protective Equipment (PPE)

- PPE Supplies
  - N95 and other respirators
  - Facemasks
  - Eye Protection
  - Gowns
  - Gloves



Routine training and competency validation, audits for adherence, and process for feedback and improvement.

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Use Personal Protective Equipment (PPE) When Caring for Patients with Confirmed or Suspected COVID-19

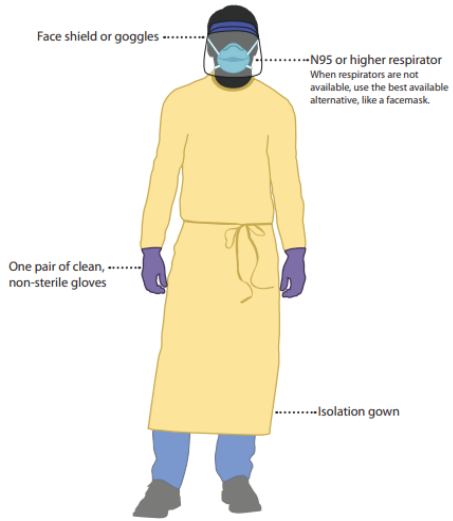
Before caring for patients with confirmed or suspected COVID-19, healthcare personnel (HCP) must:

- **Receive comprehensive training** on when and what PPE is necessary, how to don (put on) and doff (take off) PPE, limitations of PPE, and proper care, maintenance, and disposal of PPE.
- **Demonstrate competency** in performing appropriate infection control practices and procedures.

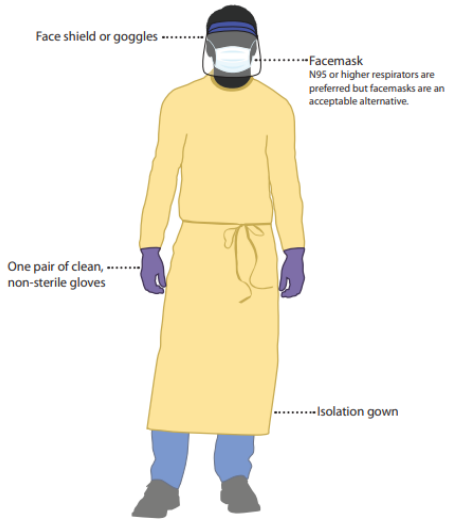
Remember:

- PPE must be donned correctly before entering the patient area (e.g., isolation room, unit if cohorting).
- PPE must remain in place and be worn correctly for the duration of work in potentially contaminated areas. PPE should not be adjusted (e.g., retying gown, adjusting respirator/facemask) during patient care.
- PPE must be removed slowly and deliberately in a sequence that prevents self-contamination. A step-by-step process should be developed and used during training and patient care.

Preferred PPE – Use N95 or Higher Respirator



Acceptable Alternative PPE – Use Facemask



CDC

www.cdc.gov/coronavirus

CS 316124-A 06/03/2020

Donning (putting on the gear):

More than one donning method may be acceptable. Training and practice using your healthcare facility's procedure is critical. Below is one example of donning.

1. **Identify and gather the proper PPE to don.** Ensure choice of gown size is correct (based on training).
2. **Perform hand hygiene using hand sanitizer.**
3. **Put on isolation gown.** Tie all of the ties on the gown. Assistance may be needed by another HCP.
4. **Put on NIOSH-approved N95 filtering facepiece respirator or higher (use a facemask if a respirator is not available).** If the respirator has a nosepiece, it should be fitted to the nose with both hands, not bent or tented. Do not pinch the nosepiece with one hand. Respirator/facemask should be extended under chin. Both your mouth and nose should be protected. Do not wear respirator/facemask under your chin or store in scrubs pocket between patients.*
   - » **Respirator:** Respirator straps should be placed on crown of head (top strap) and base of neck (bottom strap). Perform a user seal check each time you put on the respirator.
   - » **Facemask:** Mask ties should be secured on crown of head (top tie) and base of neck (bottom tie). If mask has loops, hook them appropriately around your ears.
5. **Put on face shield or goggles.** When wearing an N95 respirator or half facepiece elastomeric respirator, select the proper eye protection to ensure that the respirator does not interfere with the correct positioning of the eye protection, and the eye protection does not affect the fit or seal of the respirator. Face shields provide full face coverage. Goggles also provide excellent protection for eyes, but fogging is common.
6. **Put on gloves.** Gloves should cover the cuff (wrist) of gown.
7. **HCP may now enter patient room.**

Doffing (taking off the gear):

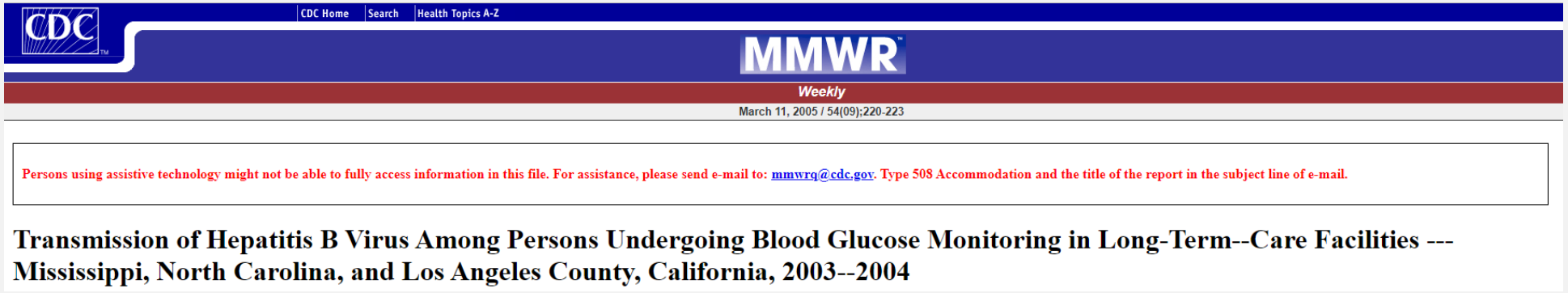
More than one doffing method may be acceptable. Training and practice using your healthcare facility's procedure is critical. Below is one example of doffing.

1. **Remove gloves.** Ensure glove removal does not cause additional contamination of hands. Gloves can be removed using more than one technique (e.g., glove-in-glove or bird beak).
2. **Remove gown.** Untie all ties (or unsnap all buttons). Some gown ties can be broken rather than untied. Do so in gentle manner, avoiding a forceful movement. Reach up to the shoulders and carefully pull gown down and away from the body. Rolling the gown down is an acceptable approach. Dispose in trash receptacle.*
3. **HCP may now exit patient room.**
4. **Perform hand hygiene.**
5. **Remove face shield or goggles.** Carefully remove face shield or goggles by grabbing the strap and pulling upwards and away from head. Do not touch the front of face shield or goggles.
6. **Remove and discard respirator (or facemask if used instead of respirator).*** Do not touch the front of the respirator or facemask.
   - » **Respirator:** Remove the bottom strap by touching only the strap and bring it carefully over the head. Grasp the top strap and bring it carefully over the head, and then pull the respirator away from the face without touching the front of the respirator.
   - » **Facemask:** Carefully untie (or unhook from the ears) and pull away from face without touching the front.
7. **Perform hand hygiene after removing the respirator/facemask** and before putting it on again if your workplace is practicing reuse.

****Facilities implementing reuse or extended use of PPE will need to adjust their donning and doffing procedures to accommodate those practices.***

www.cdc.gov/coronavirus

Injection Safety



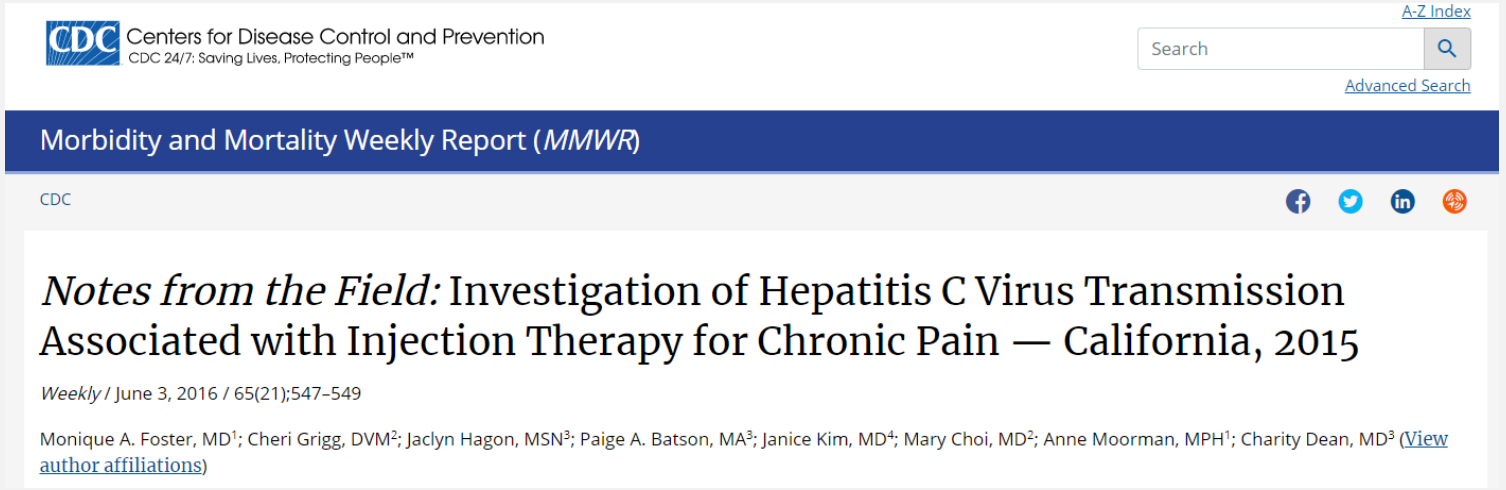
CDC | CDC Home | Search | Health Topics A-Z

MMWR Weekly

March 11, 2005 / 54(09);220-223

Persons using assistive technology might not be able to fully access information in this file. For assistance, please send e-mail to: mmwrq@cdc.gov. Type 508 Accommodation and the title of the report in the subject line of e-mail.

Transmission of Hepatitis B Virus Among Persons Undergoing Blood Glucose Monitoring in Long-Term--Care Facilities --- Mississippi, North Carolina, and Los Angeles County, California, 2003--2004



CDC Centers for Disease Control and Prevention

CDC 24/7: Saving Lives, Protecting People™

A-Z Index

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Morbidity and Mortality Weekly Report (*MMWR*)

CDC

Notes from the Field: Investigation of Hepatitis C Virus Transmission Associated with Injection Therapy for Chronic Pain — California, 2015

Weekly / June 3, 2016 / 65(21);547–549

Monique A. Foster, MD[1]; Cheri Grigg, DVM[2]; Jaclyn Hagon, MSN[3]; Paige A. Batson, MA[3]; Janice Kim, MD[4]; Mary Choi, MD[2]; Anne Moorman, MPH[1]; Charity Dean, MD[3] (View author affiliations)

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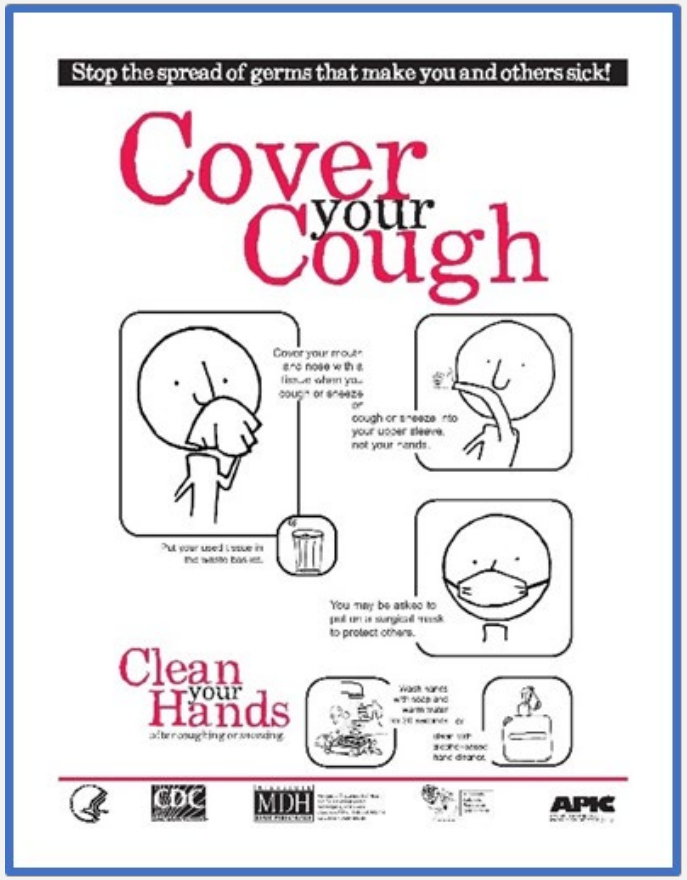
Injection Safety

- Policies on safe injection practices
  - Staff are trained
  - Facility is monitoring compliance
- Appropriate supplies are available
- Facility is tracking access and use of controlled substances to prevent drug diversion

Respiratory Hygiene



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Regulated Biohazard Waste

1. Items that would release blood or other potentially infectious materials in a liquid or semi-liquid state.
2. Items that are caked with dried blood or other potentially infectious materials.
3. Contaminated sharps.
4. Pathological and microbiological wastes.

1910.1030 - Bloodborne pathogens. | Occupational Safety and Health Administration (osha.gov)

Sharps Disposal

- Used needles and sharps are to be placed in puncture-resistant, leak-proof containers.
- Label as “biohazard”
- Do not overfill – discard when ¾ full
- The Texas Commission on Environmental Quality (TCEQ) has guidelines on how to manage and dispose medical waste.

Medical Waste - Texas Commission on Environmental Quality - www.tceq.texas.gov

Pause for a Poll

How far can a sneeze travel?

A. 3 feet

B. 6 feet

C. 16 feet

D. 26 feet

Antibiotic Resistance

Texas Notifiable MDROs

- **Carbapenem-resistant *Enterobacterales***
  - *Escherichia coli*
  - *Klebsiella pneumoniae*
  - *Klebsiella oxytoca*
  - Production of carbapenemase (i.e. KPC, NDM, VIM, IMP)
- ***C. auris*: *Candida auris***
- **VISA:** Vancomycin-Intermediate *Staphylococcus aureus*
- **VRSA:** Vancomycin-Resistant *Staphylococcus aureus*

http://www.dshs.texas.gov/idcu/investigation/conditions/

UNUSUAL ANTIBIOTIC-RESISTANT GERMS

- Resistant to all or most antibiotics tested, making them hard to treat, and
- Uncommon in a geographic area or the US, or
- Have special genes that allow them to spread their resistance to other germs

Examples of unusual resistance: Vancomycin-resistant *Staphylococcus aureus* (VRSA), *Candida auris*, and certain types of "nightmare bacteria" such as carbapenem-resistant Enterobacteriaceae (CRE).

Antibiotic Resistance Laboratory Network

The AR Lab Network

- **Detect**: Stronger detection of new resistance and better trend tracking
- **Prevent**: Better data for stronger infection control
- **Innovate**: Lab samples may be available through the AR Isolate Bank
- **Respond**: Collaboration to identify spread and support outbreak response

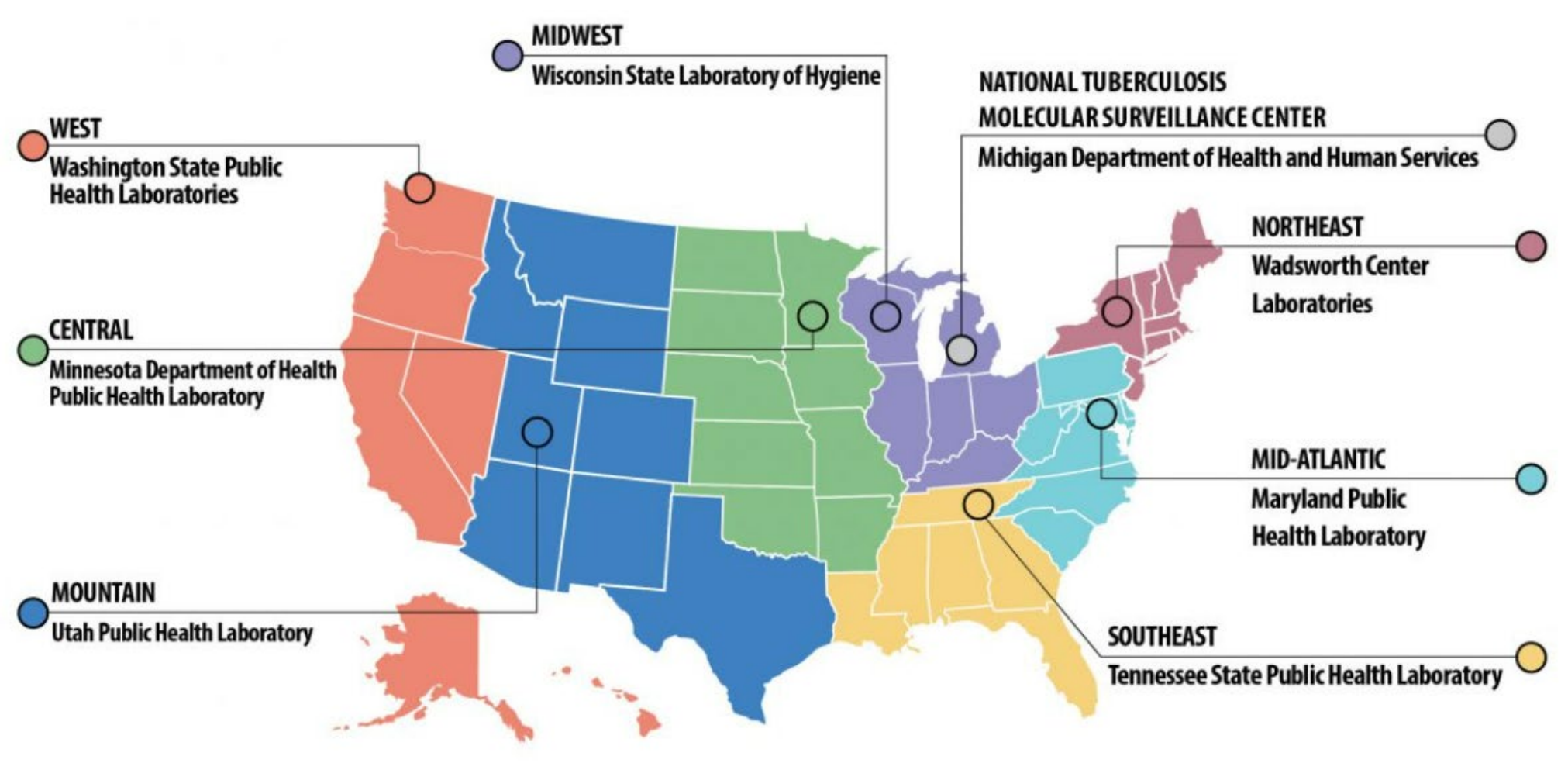
CDC Laboratory Expertise & Coordination

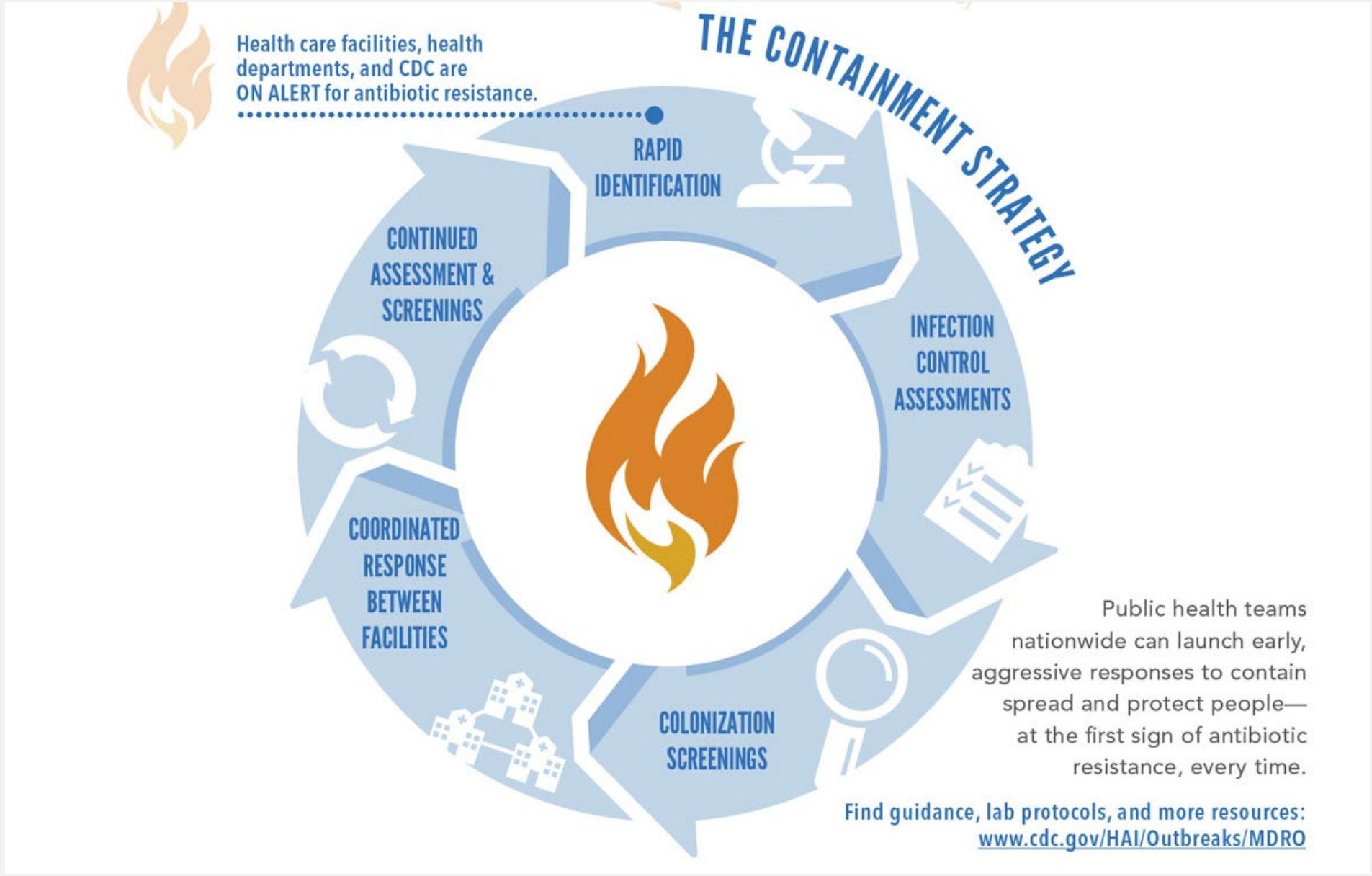
7 Regional Labs

1 National Tuberculosis Molecular Surveillance Center

56 State & Local Labs, building on CDC's existing healthcare, food, and community programs.

CDC Antibiotic Resistance Laboratory Network (AR Lab Network)





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Facilities work together to protect patients.

Common Approach *(Not enough)*

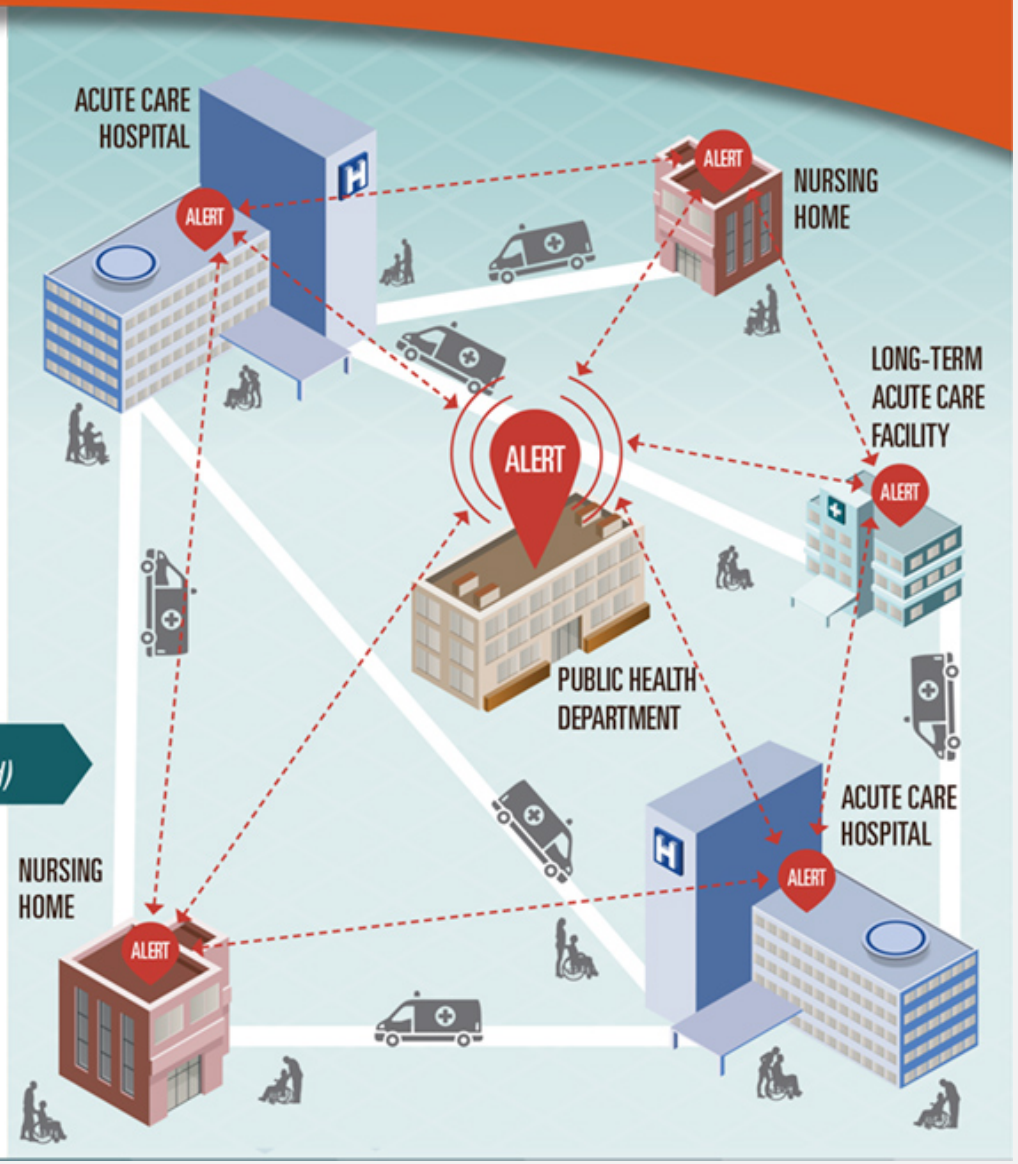
- Patients can be transferred back and forth from facilities for treatment without all the communication and necessary infection control actions in place.

Independent Efforts *(Still not enough)*

- Some facilities work independently to enhance infection control but are not often alerted to antibiotic-resistant or *C. difficile* germs coming from other facilities or outbreaks in the area.
- Lack of shared information from other facilities means that necessary infection control actions are not always taken and germs are spread to other patients.

Coordinated Approach *(Needed)*

- Public health departments track and **alert** health care facilities to antibiotic-resistant or *C. difficile* germs coming from other facilities and outbreaks in the area.
- Facilities and public health authorities share information and implement shared infection control actions to stop spread of germs from facility to facility.



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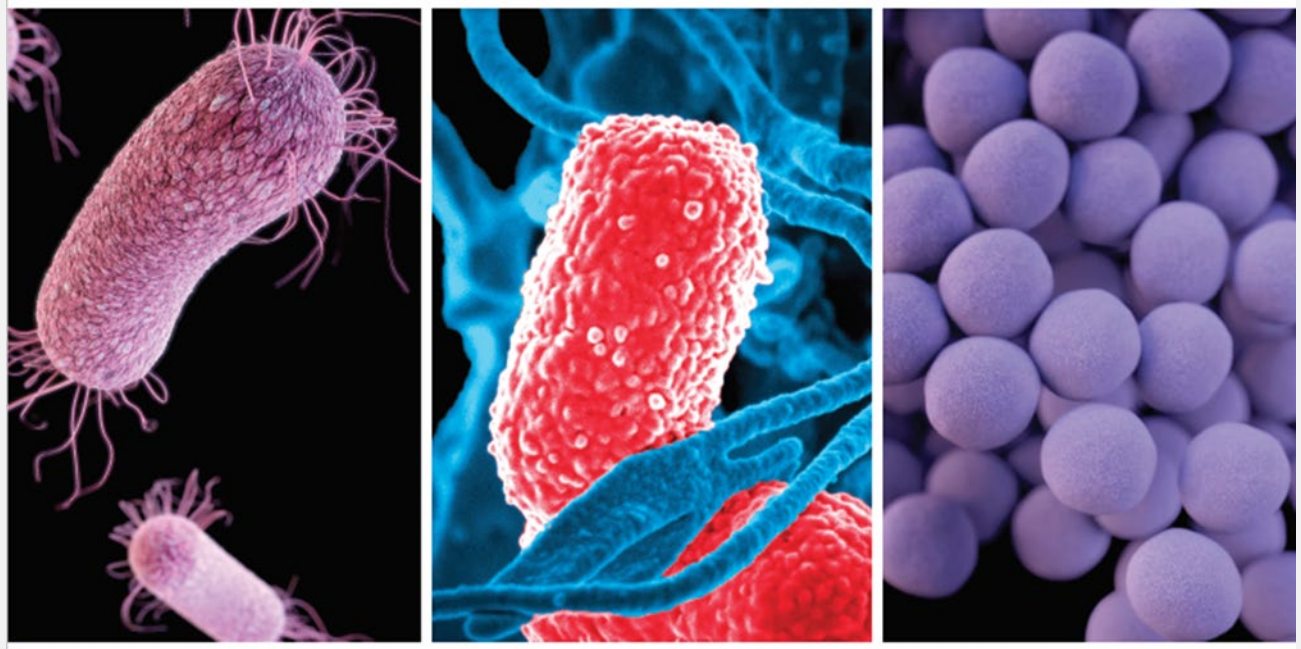
Public Health Response

Interim Guidance for a Public Health Response to Contain Novel or Targeted Multidrug-resistant Organisms (MDROs)



Texas Antibiotic Resistance Lab Network Response Plan and Epi-Lab Work Plan

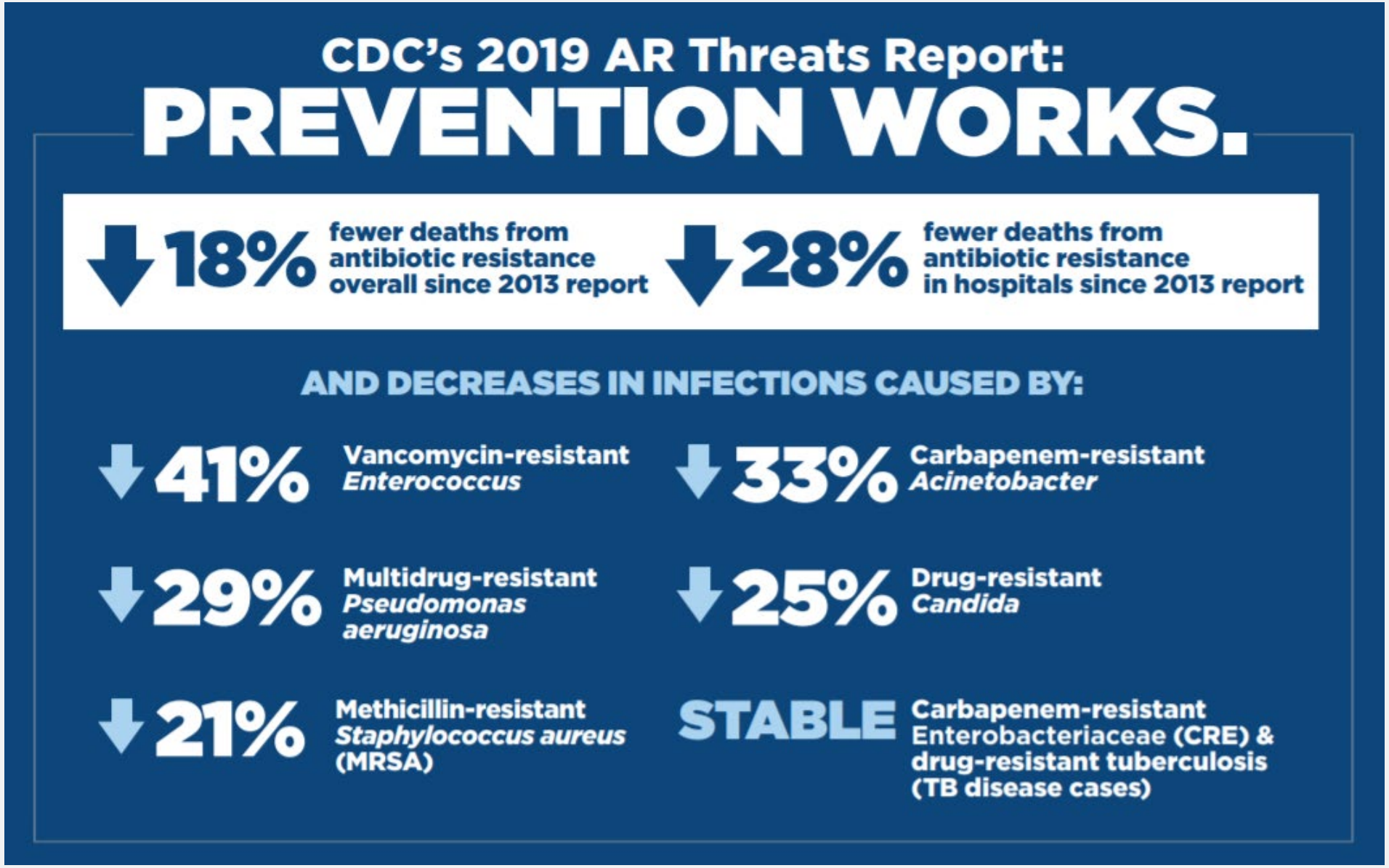
Developed by:

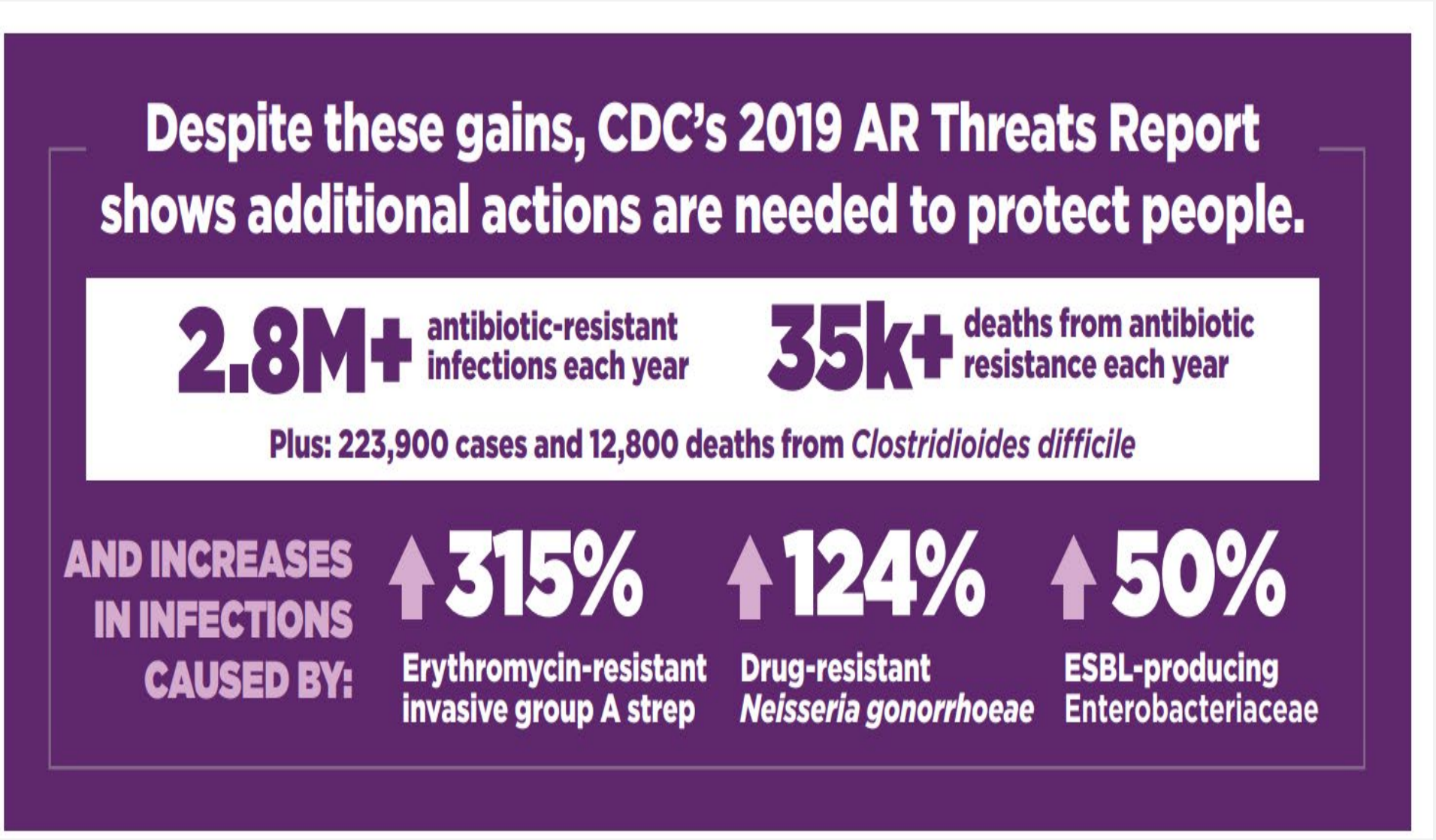
Texas Department of State Health Services Laboratory and Healthcare Safety Unit

July 2021

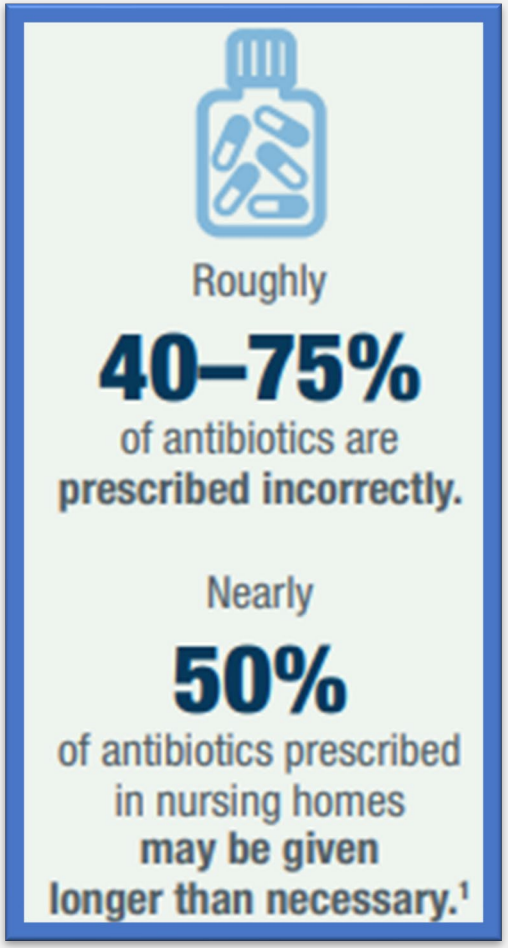
TEXAS Health and Human Services

Texas Department of State Health Services


CDC's 2019 AR Threats Report:
PREVENTION WORKS.
18% fewer deaths from antibiotic resistance overall since 2013 report
28% fewer deaths from antibiotic resistance in hospitals since 2013 report
AND DECREASES IN INFECTIONS CAUSED BY:
41% Vancomycin-resistant Enterococcus
33% Carbapenem-resistant Acinetobacter
29% Multidrug-resistant Pseudomonas aeruginosa
25% Drug-resistant Candida
21% Methicillin-resistant Staphylococcus aureus (MRSA)
STABLE Carbapenem-resistant Enterobacteriaceae (CRE) & drug-resistant tuberculosis (TB disease cases)


Despite these gains, CDC's 2019 AR Threats Report shows additional actions are needed to protect people.
2.8M+ antibiotic-resistant infections each year
35k+ deaths from antibiotic resistance each year
Plus: 223,900 cases and 12,800 deaths from Clostridioides difficile
AND INCREASES IN INFECTIONS CAUSED BY:
315% Erythromycin-resistant invasive group A strep
124% Drug-resistant Neisseria gonorrhoeae
50% ESBL-producing Enterobacteriaceae

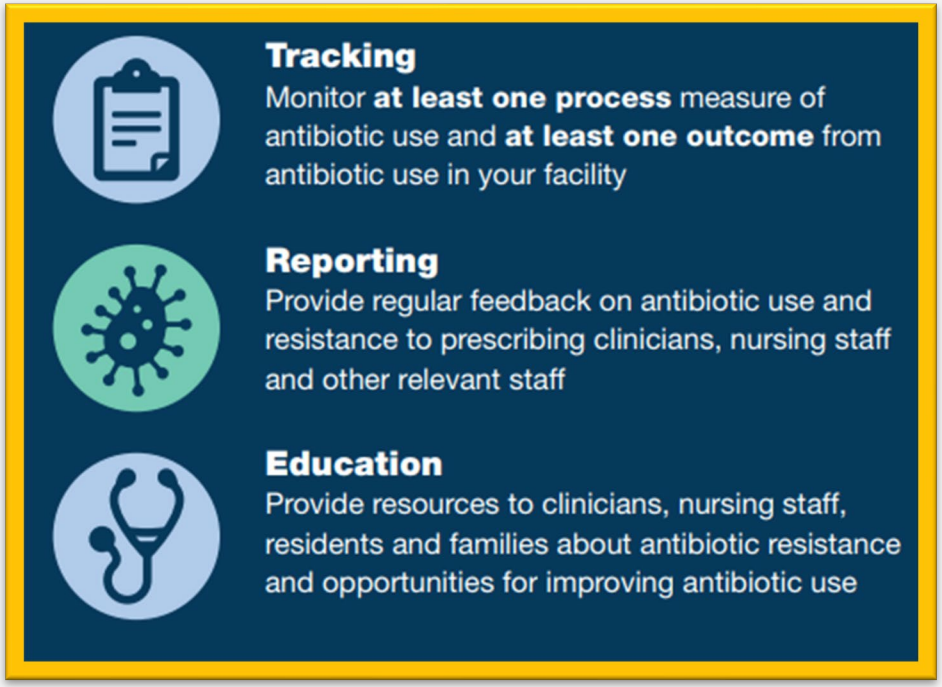
Importance of Antibiotic Stewardship



- What contributes to antibiotic overuse?
  - Prescribing antibiotics to prevent infections.
  - Prescribing antibiotics for colonization.
  - Poor communication between transfer facilities.
  - Poor infection control practices.

Core Elements for Antibiotic Stewardship in Nursing Homes: Creating a Culture to Improve Antibiotic Use in Nursing Homes (cdc.gov)

CDC Core Elements of Antibiotic Stewardship



Antibiotic Stewardship Program

***Mission**: Provide direction for the development of a collaborative statewide program that empowers healthcare providers and the public with evidence-based information, education, and tools necessary to use antimicrobials judiciously and limit the emergence and spread of resistance in Texas.*

Antimicrobial Stewardship Regional Advisory Committees

- Meetings will be set during the 2022 calendar year.

Each committee will consist of:

- Physicians
- Directors of Nursing or (equivalent consultants with long-term care facilities)
- Public health officials knowledgeable about antibiotic stewardship
- Other interested parties

For more information:

- Webpage: https://www.dshs.state.tx.us/IDCU/Antimicrobial/Antimicrobial-Stewardship.aspx
- Email: AntibioticStewardship@dshs.texas.gov

Follow DSHS on social media!

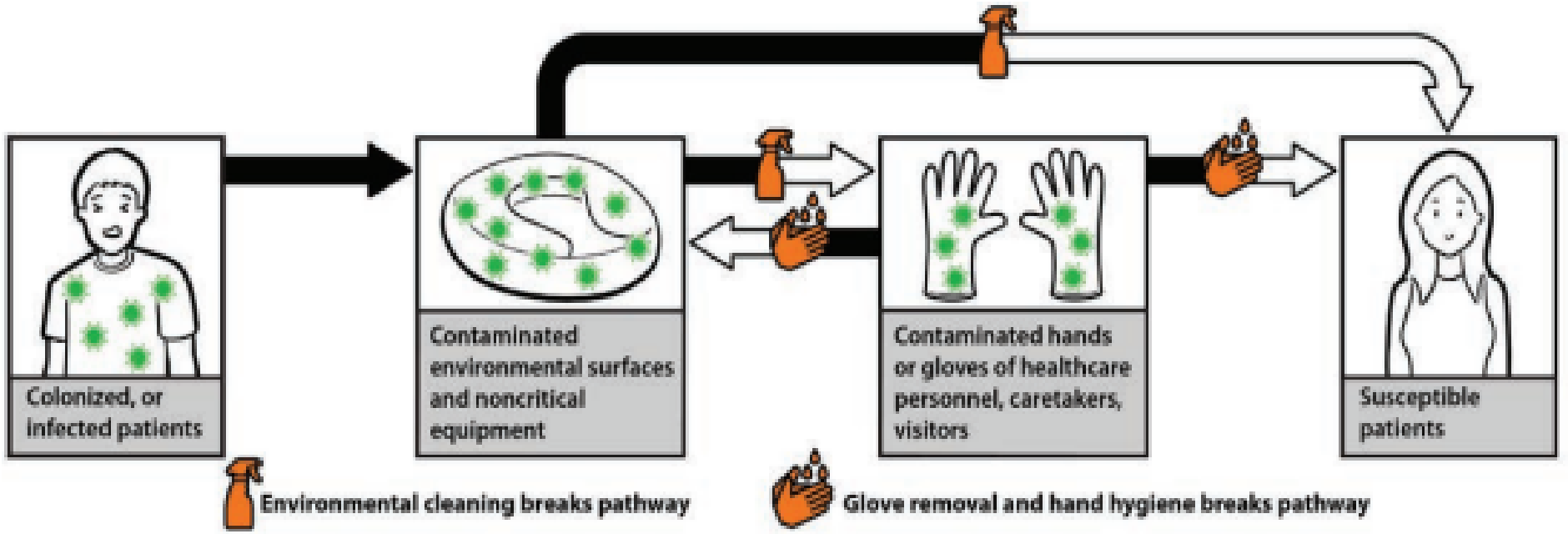
Find us on Twitter and Instagram: **@TexasDSHS**

and on Facebook and YouTube at:

Texas Department of State Health Services

Cleaning, Disinfection & Sterilization

Role of the Environment



https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-RLS-H.pdf

Role of the Environment

Organism	Duration of Survival
Acinetobacter sp.	3 days-5 months
Clostridioides difficile	5 months
E. coli	1.5 hours-16 months
Enterococcus (VRE, VSE)	5 days-4 months
Klebsiella sp.	2 hours->30 months
Proteus vulgaris	1-2 days
Pseudomonas aeruginosa	6 hours-16 months
Serratia marcescens	3 days-2 months
S. aureus (including MRSA)	7 days-7 months

Environmental Cleaning and Disinfection

- Select appropriate disinfectants and cleaning products.
  - EPA-approved for use in healthcare
  - Consider the organism(s)
  - Check compatibility of equipment and environmental surfaces with the disinfectant.

Environmental Cleaning and Disinfection

- Policies on cleaning and disinfection
  - Daily room cleans, terminal cleans, high-touch surface cleaning
  - Disinfecting shared equipment
  - Using single-use/disposable products wherever possible
- Staff are trained upon hire and at least annually
  - Includes a competency check

Environmental Cleaning and Disinfection

- Appropriate supplies are available

  - List A: EPA's Registered Antimicrobial Products as Sterilizers
  - List B: EPA Registered Tuberculocide Products Effective Against *Mycobacterium tuberculosis*
  - List C: EPA's Registered Antimicrobial Products Effective Against Human HIV-1 Virus
  - List D: EPA's Registered Antimicrobial Products Effective Against Human HIV-1 and Hepatitis B Virus
  - List E: EPA's Registered Antimicrobial Products Effective Against *Mycobacterium tuberculosis* Human HIV-1 and Hepatitis B Virus
  - List F: EPA's Registered Antimicrobial Products Effective Against Hepatitis C Virus
  - List G: EPA's Registered Antimicrobial Products Effective Against Norovirus
  - List H: EPA's Registered Antimicrobial Products Effective Against Methicillian Resistant Staphyloccus aureus (MRSA) and/or Vancomycin Resistant Enterococcus faecalis or faecium (VRE)
  - List J: EPA's Registered Antimicrobial Products for Medical Waste Treatment
  - List K: EPA's Registered Antimicrobial Products Effective Against Clostridium Difficile Spores
  - List L: EPA's Registered Antimicrobial Products That Meet the CDC Criteria for Use Against the Ebola Virus
  - List M: Registered Antimicrobial Products with Label Claims for Avian (Bird) Flu Disinfectants
  - List N: Disinfectants for Use Against SARS-CoV-2
  - List O: Disinfectants for Use Against Rabbit Hemorrhagic Disease Virus (RHDV2)
  - NEW List P: Antimicrobial Products Registered with EPA for Claims Against Candida Auris

Environmental Cleaning and Disinfection

*KILLS HIV-1 (AIDS VIRUS), HEPATITIS B VIRUS (HBV) AND HEPATITIS C VIRUS (HCV) ON THE PRE-CLEANED ENVIRONMENTAL SURFACES/OBJECTS AND PRE-CLEANED EXTERNAL SURFACES OF ULTRASOUND TRANSDUCERS AND PROBES PREVIOUSLY SOILED WITH BLOOD/BODY FLUIDS in two (2) minutes at room temperature (68°-77°F) in healthcare or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids; and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus Type 1 (HIV-1) (associated with AIDS), Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV).

Areas of Use: Hospital and Healthcare Settings: Ambulatory Surgical Centers (ASC), Clinics, Dental Offices, Dialysis Clinics, Home Health Care, Hospices, Hospitals, Laboratory, Nursing homes, Physical therapy, Physician's offices, Radiology, Rehabilitation, Transport vehicles. **Critical Care Areas:** CCU, Emergency Rooms, ICU, Neonatal Intensive Care Units (NICU), Operating Rooms, Pediatric Intensive Care Units (PICU), Surgery and Surgical Intensive Care Unit (SICU). **Hospital, Healthcare, and Critical Care Use Sites:** May be used on hard non-porous surfaces of: bed railings; blood glucose meters; cabinets; carts; chairs; counters; dental unit instrument trays; exam tables; gurneys; isolettes; IV poles; stethoscopes; stretchers; tables; telephones; toilet seats; and hard non-porous outside surfaces of: amalgamators and dental curing lights; diagnostic equipment; patient monitoring equipment; patient support and delivery equipment.

This product is not to be used as a terminal sterilant/high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization or high level disinfection.

DIRECTIONS FOR USE It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

To Dispense Wipes: Remove lid and discard inner seal from canister. Find center of wipe roll, remove first wipe for use, twist corner of next wipe into a point and thread through the hole in the canister lid. Pull through about one inch. Replace lid. Dispense remaining wipes as necessary by pulling out at an angle. When not in use keep center cap of lid closed to prevent moisture loss.

TO DISINFECT AND DEODORIZE: To disinfect nonfood contact surfaces only: Unfold a clean wipe and thoroughly wet surface. Allow treated surface to remain wet for a full two (2) minutes. Let air dry. For heavily soiled surfaces, use a wipe to pre-clean prior to disinfecting. These directions also apply to *Mycobacterium bovis* BCG (Turberculosis) at 68°F (20°C).

(01)10310819000571

***SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1, HEPATITIS B VIRUS (HBV) AND HEPATITIS C VIRUS (HCV) OF SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS**

Personal protection: When using this product, wear disposable protective gloves, protective gowns, masks, and eye coverings when handling HIV-1 (AIDS Virus), HBV or HCV infected blood or body fluids. **Cleaning procedure:** All blood and other body fluids must be thoroughly cleaned from surfaces and objects before disinfection by the germicidal wipe. Open, unfold and use first germicidal wipe to remove heavy soil. **Disposal of infectious materials:** Used wipe, blood and other body fluids should be disposed of according to local regulation for infectious waste disposal. **Contact time:** Use second germicidal wipe to thoroughly wet surface. Allow to remain wet two (2) minutes, let air dry.

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

WARNING. Causes substantial but temporary eye damage. Do not get in eyes or on clothing. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using restroom. Remove and wash contaminated clothing before reuse.

FIRST AID Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. If on skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

PHYSICAL OR CHEMICAL HAZARD Combustible. Do not use or store near heat or open flame. Do not use on natural marble, windows, unpainted wood, brass, clear plastic or colored grout.

Test wipe on small inconspicuous area first.

STORAGE AND DISPOSAL Do not contaminate water, food, or feed by storage and disposal. Storage: Do not store near heat or open flame. When not in use keep center cap of lid closed to prevent moisture loss. **Towelette Disposal:** Do not reuse towelette. Dispose of used towelette in trash. Do not flush in toilet. **Container Disposal:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling. If recycling is not available, put in trash collection.

EPA REG. NO. 9480-4
EPA EST. NO. A= 9480-NY-1, C= 72956-AR-1, D= 8251-WI-4
Alpha character will precede batch code on product

Manufactured for:
Professional Disposables International, Inc.
Two Nice-Pak Park
Orangeburg, NY 10962-1376
1-800-999-6423
Made in USA with domestic and imported materials

8KQ55101

NOT FOR USE ON SKIN FOR USE ON HARD, NON POROUS SURFACES ONLY

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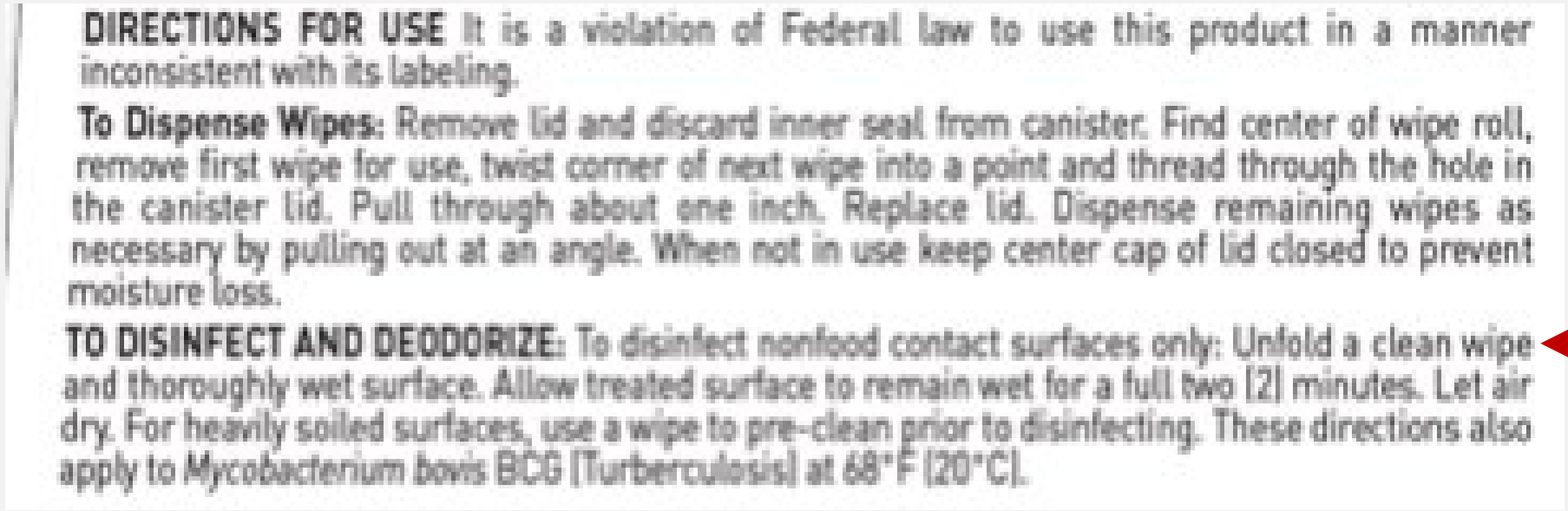
Disinfectant Label

Is the product a 1 step or 2 step disinfectant?



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Disinfectant Label

What organisms does the product kill?

Disinfectant Label

What is the contact time?

- Multiple disinfectant cloths may need to be used to wet all surfaces.

Personal protection: When using this product, wear disposable protective gloves, protective gowns, masks, and eye coverings when handling HIV-1 (AIDS Virus), HBV or HCV infected blood or body fluids. **Cleaning procedure:** All blood and other body fluids must be thoroughly cleaned from surfaces and objects before disinfection by the germicidal wipe. Open, unfold and use first germicidal wipe to remove heavy soil. **Disposal of infectious materials:** Used wipe, blood and other body fluids should be disposed of according to local regulation for infectious waste disposal. **Contact time:** Use second germicidal wipe to thoroughly wet surface. Allow to remain wet two (2) minutes, let air dry.

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Essentials of Environmental Cleaning

- Have regular cleaning schedules and adequate staffing levels.
- Assign who cleans what.
- Provide proper education and training to all staff.
- Ensure pest control is done routinely.

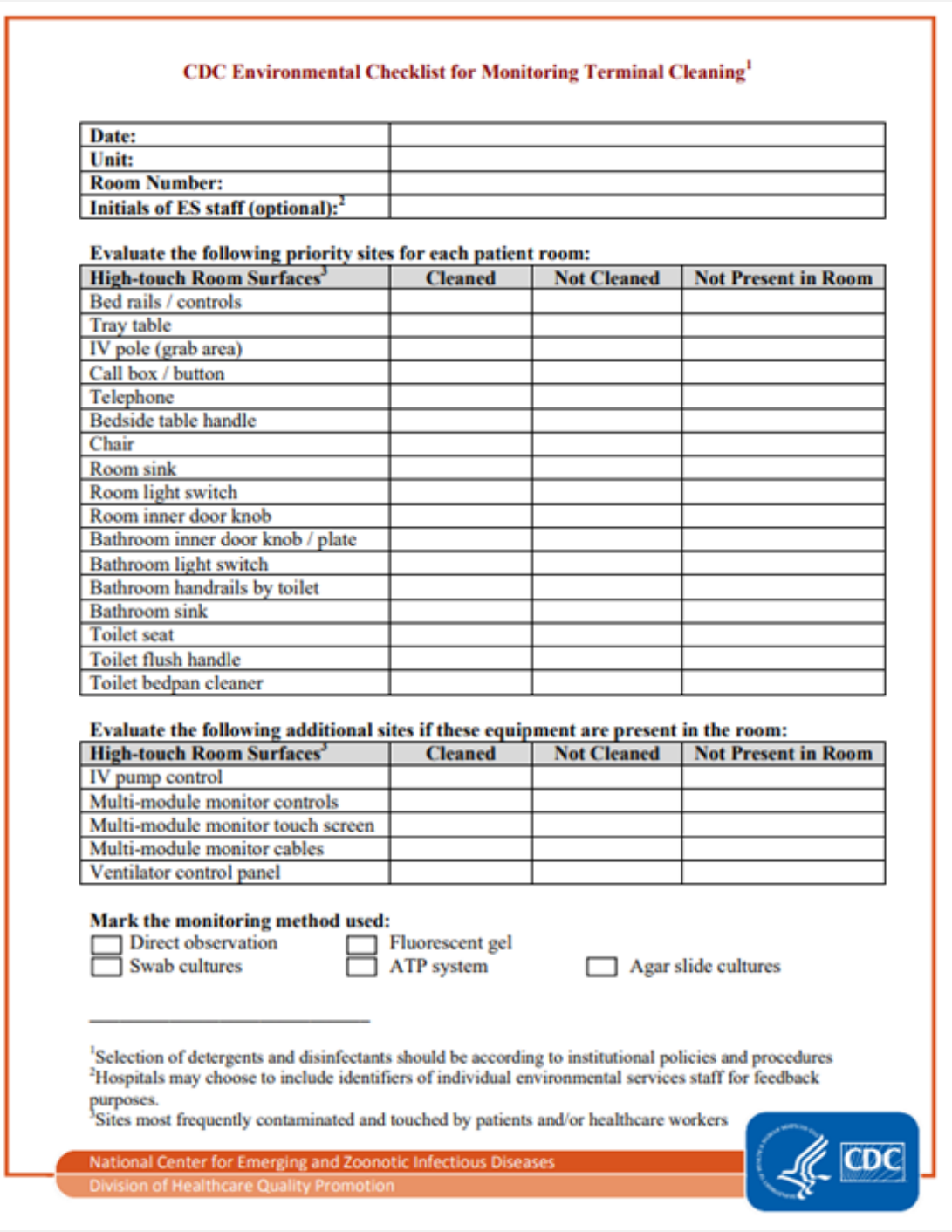
Essentials of Environmental Cleaning

- Monitor cleaning processes.
  - Direct observation
  - Fluorescent markers
  - ATP bioluminescence
  - Environmental cultures (not routinely used)

ATP Bioluminescence

Fluorescent Markers

Observation/Visual Inspection



CDC Environmental Checklist for Monitoring Terminal Cleaning[1]

Date:	
Unit:	
Room Number:	
Initials of ES staff (optional):[2]	

Evaluate the following priority sites for each patient room:

High-touch Room Surfaces[3]	Cleaned	Not Cleaned	Not Present in Room
Bed rails / controls			
Tray table			
IV pole (grab area)			
Call box / button			
Telephone			
Bedside table handle			
Chair			
Room sink			
Room light switch			
Room inner door knob			
Bathroom inner door knob / plate			
Bathroom light switch			
Bathroom handrails by toilet			
Bathroom sink			
Toilet seat			
Toilet flush handle			
Toilet bedpan cleaner			

Evaluate the following additional sites if these equipment are present in the room:

High-touch Room Surfaces[3]	Cleaned	Not Cleaned	Not Present in Room
IV pump control			
Multi-module monitor controls			
Multi-module monitor touch screen			
Multi-module monitor cables			
Ventilator control panel			

Mark the monitoring method used:

☐ Direct observation ☐ Fluorescent gel
☐ Swab cultures ☐ ATP system ☐ Agar slide cultures

[1]Selection of detergents and disinfectants should be according to institutional policies and procedures
[2]Hospitals may choose to include identifiers of individual environmental services staff for feedback purposes.
[3]Sites most frequently contaminated and touched by patients and/or healthcare workers

National Center for Emerging and Zoonotic Infectious Diseases
Division of Healthcare Quality Promotion

CDC

TEXAS Health and Human Services

Texas Department of State Health Services

Table 2. Ideal characteristics of finishes, furnishings, and other surfaces (e.g., floors)

Characteristic	Selection guidance
Cleanable	Avoid items with hard-to-clean features (e.g., crevasses). Do not use carpet in patient care areas. Select material that can withstand repeated cleaning.
Easy to maintain and repair	Avoid materials that are prone to cracks, scratches, or chips, and quickly patch/repair if they occur. Select materials that are durable or easy to repair.
Resistant to microbial growth	Avoid materials that hold moisture, such as wood or cloth, because these facilitate microbial growth. Select metals and hard plastics.
Nonporous	Avoid items with porous surfaces, such as cotton, wood and nylon. Avoid porous plastics, such as polypropylene, in patient care areas.
Seamless	Avoid items with seams. Avoid upholstered furniture in patient care areas.

Common Cleaning Gaps

- Contact Time
- Improper mixing of cleaning products
- Use of bristle brooms
- Use of mop and bucket
- Dry dusting
- Vacuum cleaners
- Dirty partition curtains

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Linen & Laundry

- All used linen and laundry is considered contaminated.
- Keep clean linen covered or stored properly.
- Ensure laundry area has availability of hand hygiene products.
- Wear appropriate PPE (i.e., gloves and gowns) while sorting and handling contaminated linens.
- Separate clean and dirty areas. Workflow should prevent cross-contamination.
- Perform an audit for onsite and offsite laundry facilities.

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Water Management Program

- Water Management Program required by CMS
  - *QSO-17-30- Hospitals/CAHs/NHs*
- Correct any gaps identified in water management procedures

CDC's Legionella Toolkit: https://www.cdc.gov/legionella/wmp/toolkit/index.html

Cleaning Medical Devices

Spaulding Classification System

Patient Contact	Examples	Device Classification	Minimum Inactivation Level
Intact skin		Non-Critical	Cleaning and/or Low/Intermediate Level Disinfection
Mucous membranes or non-intact skin		Semi-Critical	High Level Disinfection
Sterile areas of the body, including blood contact		Critical	Sterilization

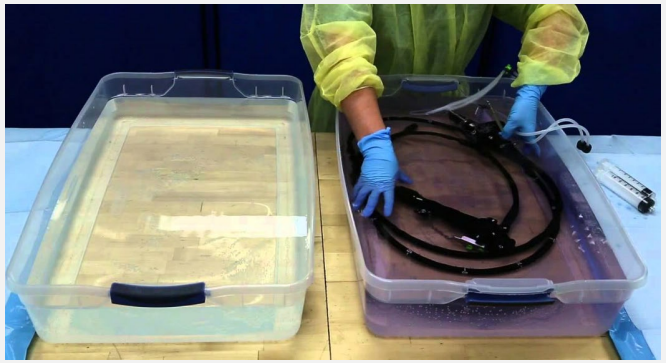
HLD vs. Sterilization

- **High-level Disinfection(HLD):** the process of complete elimination of all microorganisms in or on a device, except for small numbers of bacterial spores

- **Sterilization:** validated process used to render a product free of all forms of viable microorganisms.

High Level Disinfection (HLD)

Manual vs. Automated



CDC guidelines: https://www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines.pdf
SGNA guidelines: https://www.sgna.org/Portals/0/HLD__FINAL.pdf

Important

- All locations where HLD is conducted in your organization (centralized and de-centralized locations)
- Where all scopes, probes, and devices requiring HLD are located (clinics, ERs, ICUs, Sleep Study Centers, etc.)
- Initial and on-going competency and training of front-line staff, and those that have oversight for HLD processes
- Location and accessibility of manufacturer's instructions-for-use (HLD related equipment, devices, and supplies)
- Location and accessibility of current HLD evidence-based guidelines for front-line staff use
- Make sure that HLD policies and procedures are current, reflect HLD evidence-based guidelines, and that staff have knowledge and access to documents
- Include key stakeholders in HLD process (Infection Preventionist, Environmental Services, Facilities/ENG, leadership, front-line staff) and managers/supervisors

ENDOSCOPE REPROCESSING

1) **PRECLEAN:** point-of-use (bedside) remove debris by wiping exterior and aspiration of detergent through air/water and biopsy channels-transport to scope cleaning area in safe manner

2) **LEAK TEST:** Dry and/or Wet leak testing

3) **MANUAL CLEAN:** water and enzymatic cleaner

4) **HLD/STERILIZE:** immerse scope and perfuse HLD/sterilant through all channels for exposure time (>2% glut at 20m at 20°C). If AER used, review model-specific reprocessing protocols from both the endoscope and AER manufacturer

5) **RINSE:** scope and channels rinsed with sterile water, filtered water, or tap water. Flush channels with alcohol and dry

6) **DRY:** use forced air to dry insertion tube/channels and lint-free cloth to dry exterior.

7) **STORE:** hang in vertical position to facilitate drying; stored in a manner to protect from contamination.

   - Hang time

Sterile Processing Department

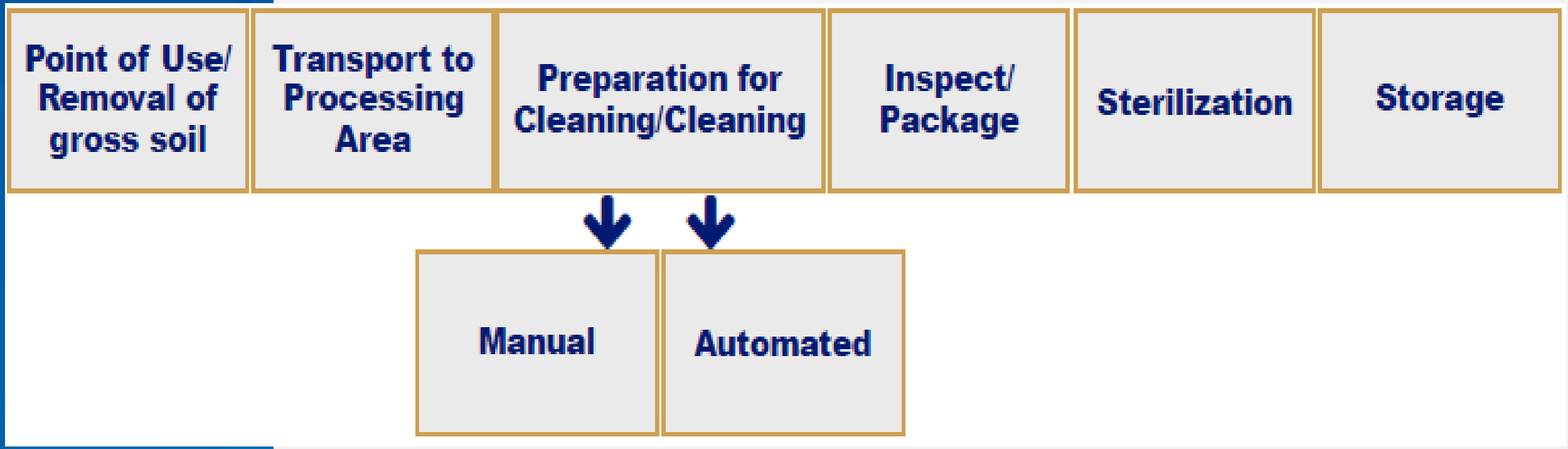
- Steam sterilization (preferred method)
  - Flash sterilization
- Low-Temp technologies
  - Ethylene Oxide "Gas"
  - Hydrogen Peroxide Gas Plasma
- Peracetic Acid
- Dry-heat
- Other methods

CDC guidelines: https://www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines.pdf

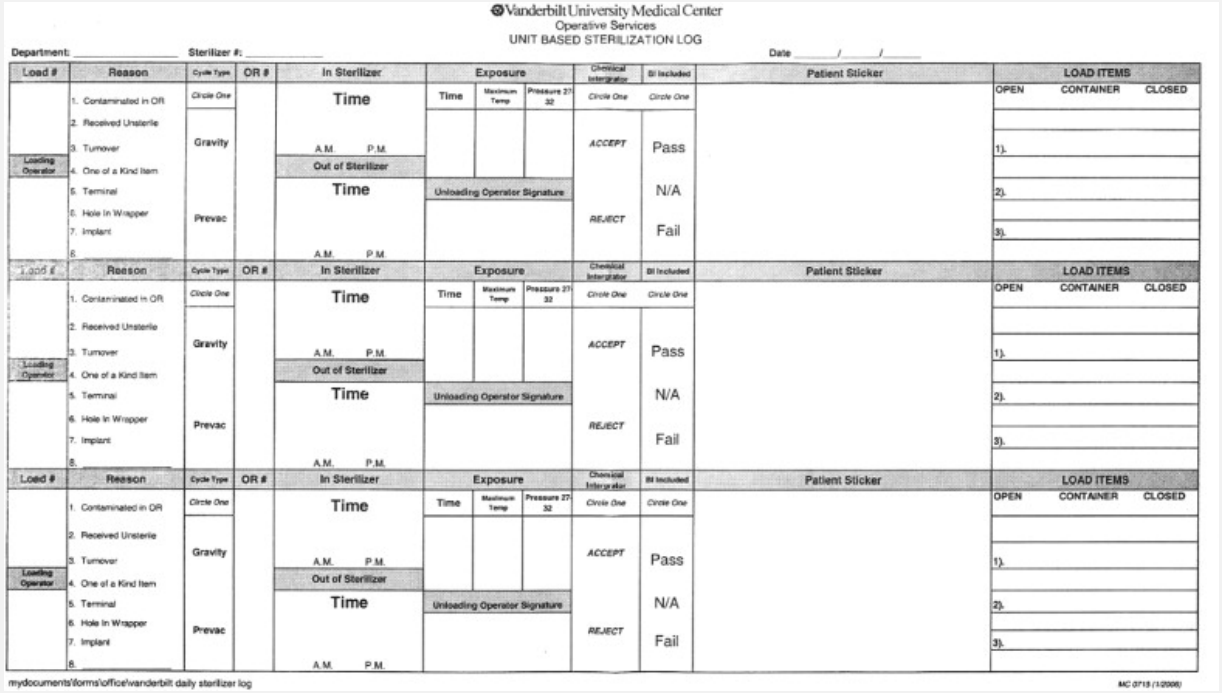
Steam Sterilization

- Most commonly used type of sterilization
- **Six parameters that must be met for sterilization to occur**
  1. Time
  2. Temperature
  3. Moisture
  4. Direct steam contact
  5. Air removal
  6. Drying

Sterilization Process



Quality Control – HLD and SPD



Vanderbilt University Medical Center
Operative Services
UNIT BASED STERILIZATION LOG

Department: _____ Sterilizer #: _____ Date ____/____/____

Load #	Reason	Cycle Type	OR #	In Sterilizer	Exposure			Chemical Integrator	BI Included	Patient Sticker	LOAD ITEMS
		Circle One		Time	Time	Maximum Temp	Pressure 27-32	Circle One	Circle One		OPEN CONTAINER CLOSED
	1. Contaminated in OR 2. Received Unsterile 3. Turnover	Gravity		A.M. P.M.				ACCEPT	Pass		1).
Loading Operator	4. One of a Kind Item 5. Terminal 6. Hole In Wrapper 7. Implant	Prevac		Out of Sterilizer Time A.M. P.M.	Unloading Operator Signature			REJECT	N/A Fail		2). 3).
	8.										
Load #	Reason	Cycle Type	OR #	In Sterilizer	Exposure			Chemical Integrator	BI Included	Patient Sticker	LOAD ITEMS
		Circle One		Time	Time	Maximum Temp	Pressure 27-32	Circle One	Circle One		OPEN CONTAINER CLOSED
	1. Contaminated in OR 2. Received Unsterile 3. Turnover	Gravity		A.M. P.M.				ACCEPT	Pass		1).
Loading Operator	4. One of a Kind Item 5. Terminal 6. Hole In Wrapper 7. Implant	Prevac		Out of Sterilizer Time A.M. P.M.	Unloading Operator Signature			REJECT	N/A Fail		2). 3).
	8.										
Load #	Reason	Cycle Type	OR #	In Sterilizer	Exposure			Chemical Integrator	BI Included	Patient Sticker	LOAD ITEMS
		Circle One		Time	Time	Maximum Temp	Pressure 27-32	Circle One	Circle One		OPEN CONTAINER CLOSED
	1. Contaminated in OR 2. Received Unsterile 3. Turnover	Gravity		A.M. P.M.				ACCEPT	Pass		1).
Loading Operator	4. One of a Kind Item 5. Terminal 6. Hole In Wrapper 7. Implant	Prevac		Out of Sterilizer Time A.M. P.M.	Unloading Operator Signature			REJECT	N/A Fail		2). 3).
	8.										

mydocuments\forms\office\vanderbilt daily sterilizer log

MC 0718 (1/2006)

- Hands-on training
- Annual competencies
- Audits/rounds in all areas
- Log books
- Routine maintenance

Environment of Care – Nursing Unit

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Environment of Care – Supply Room

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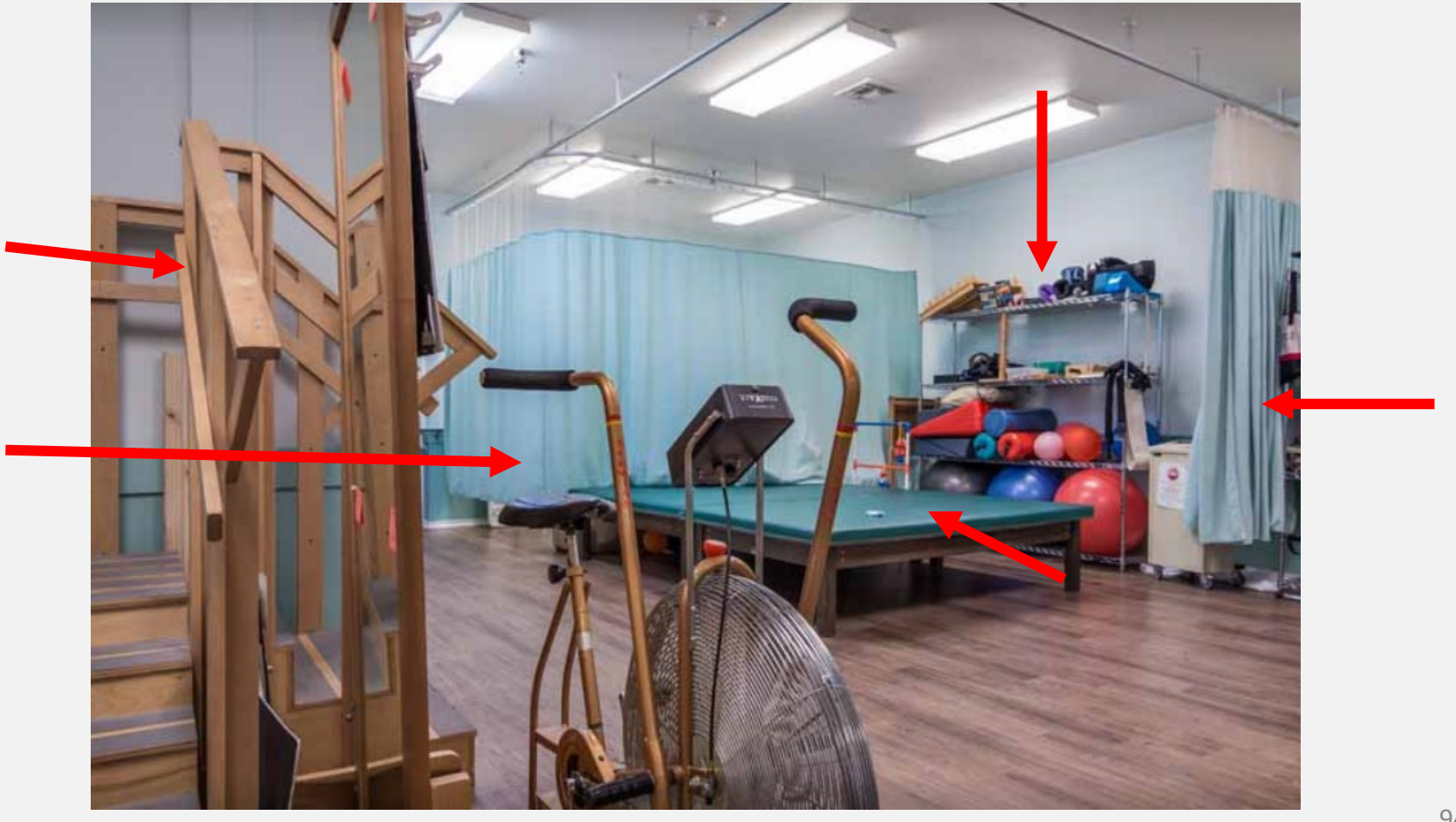
Environment of Care – Therapy Gym



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Environment of Care – EVS Practices

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Environment of Care – Construction and Renovation

- IP should be kept in the loop for any and all construction or renovation projects in the facility
- An Infection Control Risk Assessment (ICRA) is needed for all projects
  - Obtained PRIOR to starting any work
  - Posted outside of the work area
- Daily rounding for compliance

Occupational Health

IC Programs also need:

- Bloodborne Pathogens Plan
- TB Control Plan
- Respiratory Protection Program

Bloodborne Pathogens

- **Bloodborne pathogens** are infectious microorganisms in human blood that can cause disease in humans.

- The three most common pathogens include:
  1. Hepatitis B
  2. Hepatitis C
  3. Human immunodeficiency virus (HIV)

- They can be transmitted through sexual contact, mother to child, contact between broken skin or mucous membranes and infected body fluids, or accidental puncture from infected needle or sharp exposure

OSHA Bloodborne Pathogens Standard 29CFR 1910.1030

- Originally issued in 1991 and was later revised for the prevention of contaminated sharps injuries, needlesticks.

- In 2001 the revised standard, Needlestick Safety and Prevention Act included:
  - Education and selection of sharps injury reduction devices (e.g., self-sheathing needles)
  - Maintenance of a contaminated Sharps Injury Log

Bloodborne Pathogen Exposure Control Plan

- Required by OSHA and CMS 29CFR 1910.1030

- The exposure plan must be:
  - Reviewed annually or when necessary to reflect changes (such as new job positions, tasks or technology used to reduce exposures)
  - Readily available to all personnel

- Employees should receive training about the exposure plan upon hire and annually

Components of a Bloodborne Pathogen Exposure Plan

- Identification of job classifications and tasks with exposure
- Engineering & work practice controls
- PPE
- Handling of regulated medical waste and sharps
- Management of spills
- Handling of laundry
- Offer of Hepatitis B vaccination
- Post-exposure evaluation and follow up

TB Control Plan

- Administrative Measures
  - i.e. conducting annual TB risk assessment, education and training about TB infection, screening HCP, policies for management of TB infected persons
- Environmental Controls
  - Practices to reduce spread of infectious particles (i.e. negative airflow rooms)
- Use of Respiratory Protective Equipment
  - Training HCP on respiratory protection, education on respiratory hygiene/cough etiquette

TB Screening of Staff

- DSHS and CDC recommend staff receive on hire:
  - TB test
  - Individual risk assessment and interpretation of results
  - Signs and symptoms screening
- Annual TB testing no longer routinely recommended
  - Facilities recommended to perform annual risk assessment to determine testing frequency
  - certain staff with significant occupational risk may warrant annual testing

- For local TB regulations, check out the FAQ and Resources from DSHS at https://www.dshs.state.tx.us/disease/tb/resourceshcp.shtm

Respiratory Protection Program

- Required by OSHA Respiratory Protection Standard 29 CFR 1910.134
- Policies for fit-testing N-95 respirators
  - What type of fit-testing method is used
  - Who is responsible for fit-testing
  - How often it is done
- Management of personnel who fail fit-testing
  - Restricted from certain duties
  - Alternatives (i.e. PAPRs) available for use if needed
- CDC Hospital Respiratory Protection Program Toolkit
- Hospital Respiratory Protection Program Toolkit | NIOSH | CDC

Work Exclusion Policies

Table 3. Summary of suggested work restrictions for health care personnel exposed to or infected with infectious diseases of importance in health care settings, in the absence of state and local regulations (modified from ACIP recommendations[9])

Disease/problem	Work restriction	Duration	Category
Conjunctivitis	Restrict from patient contact and contact with the patient's environment	Until discharge ceases	II
Cytomegalovirus infections	No restriction		II
Diarrheal diseases			
Acute stage (diarrhea with other symptoms)	Restrict from patient contact, contact with the patient's environment, or food handling	Until symptoms resolve	IB
Convalescent stage, *Salmonella* spp.	Restrict from care of high-risk patients	Until symptoms resolve; consult with local and state health authorities regarding need for negative stool cultures	IB
Diphtheria	Exclude from duty	Until antimicrobial therapy completed and 2 cultures obtained ≥24 hours apart are negative	IB
Enteroviral infections	Restrict from care of infants, neonates, and immuno-compromised patients and their environments	Until symptoms resolve	II

https://www.cdc.gov/hicpac/pdf/infectcontrol98.pdf

Recommended Vaccines for HCP

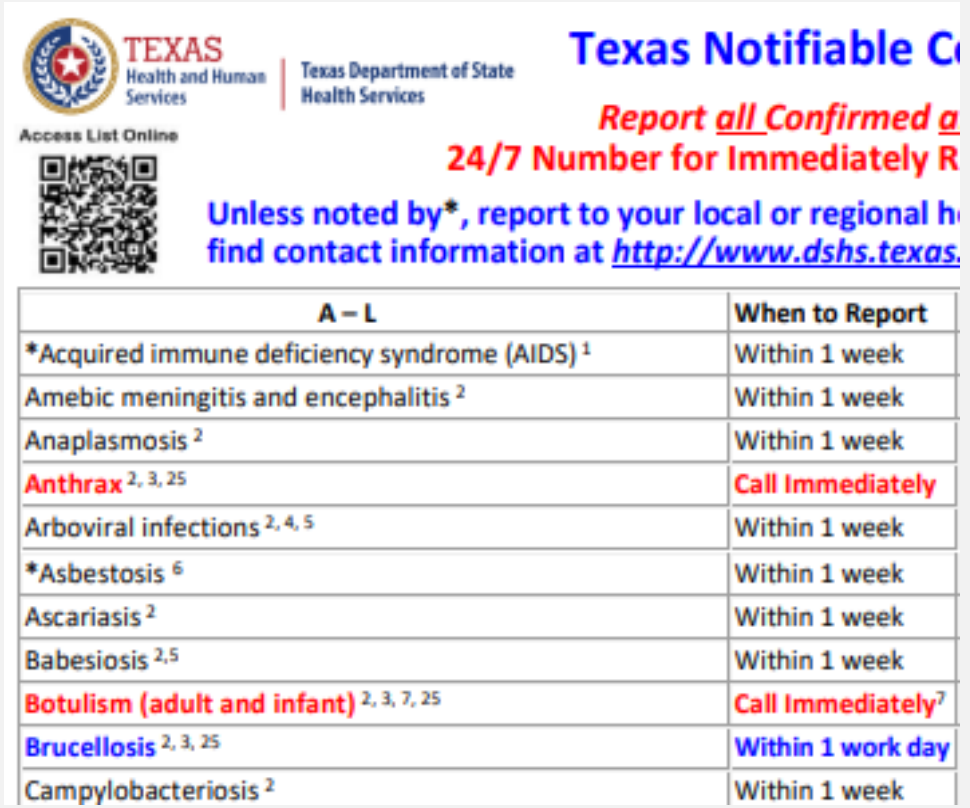
- Hepatitis B
- Flu
- MMR (measles, mumps, rubella)
- Varicella
- Tdap (tetanus, diptheria, pertussis)
- Meningococcal

- Occ. Health policy should also include how to manage staff who are unable/refuse to be vaccinated

Surveillance and Reporting

Texas Notifiable Conditions List

- Condition
- When to Report
  - Immediately
  - Within one working day
  - Within one week
- How to report
  - Local or Health Service Region Contact Information



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Texas Notifiable C

Access List Online

Report all Confirmed a

24/7 Number for Immediately R

Unless noted by*, report to your local or regional h
find contact information at *http://www.dshs.texas.*

A – L	When to Report
*Acquired immune deficiency syndrome (AIDS) [1]	Within 1 week
Amebic meningitis and encephalitis [2]	Within 1 week
Anaplasmosis [2]	Within 1 week
Anthrax [2, 3, 25]	Call Immediately
Arboviral infections [2, 4, 5]	Within 1 week
*Asbestosis [6]	Within 1 week
Ascariasis [2]	Within 1 week
Babesiosis [2,5]	Within 1 week
Botulism (adult and infant) [2, 3, 7, 25]	Call Immediately[7]
Brucellosis [2, 3, 25]	Within 1 work day
Campylobacteriosis [2]	Within 1 week

https://dshs.texas.gov/IDCU/investigation/Reporting-forms/Notifiable-Conditions-2021-Color.pdf

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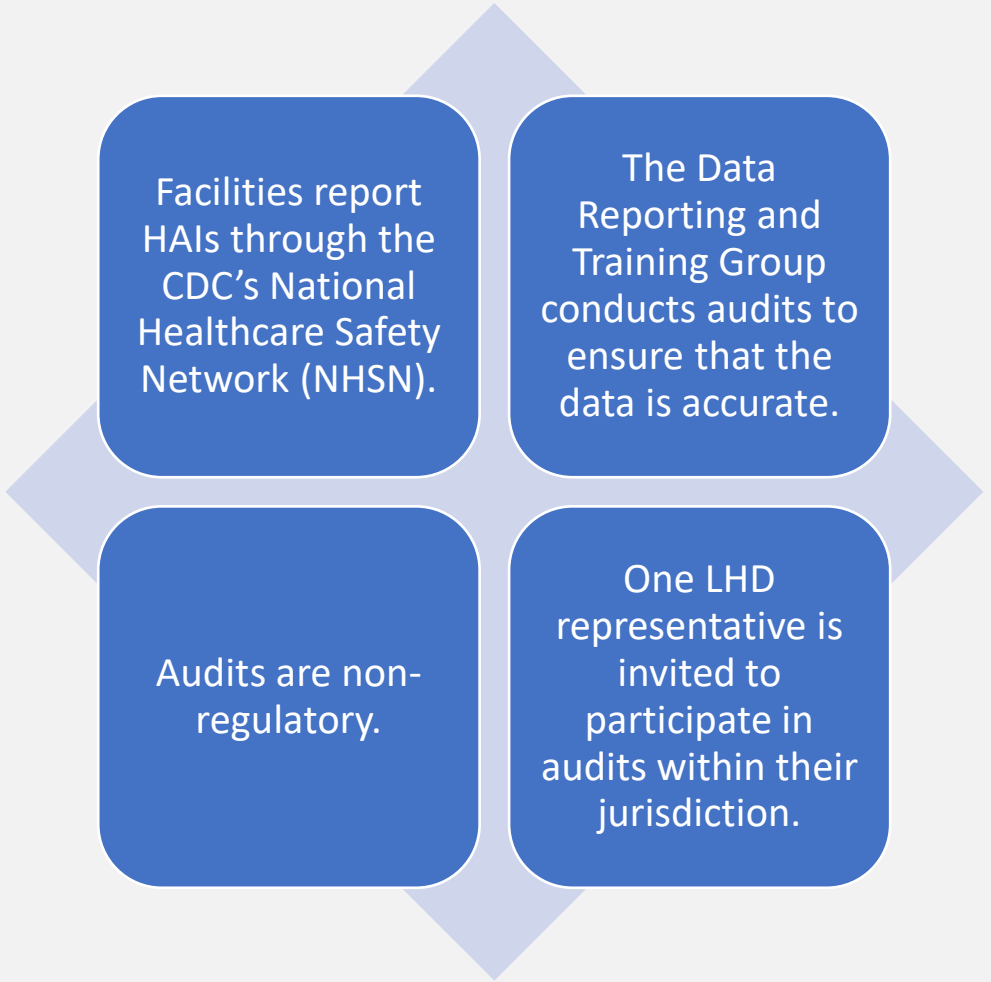
HAI Reporting in Texas

HAIs required to be reported by hospitals in Texas and for CMS:

- Central Line-Associated Bloodstream Infections (CLABSIs)
- Catheter-Associated Urinary Tract Infections (CAUTIs)
- Surgical Site Infections (SSIs) following Colon & Abd Hysterectomy
- *Clostridioides difficile* Infections (CDI) Lab ID events
- *Methicillin Resistant Staphylococcus aureus* (MRSA) Bacteremia Lab ID events



HAI Reporting

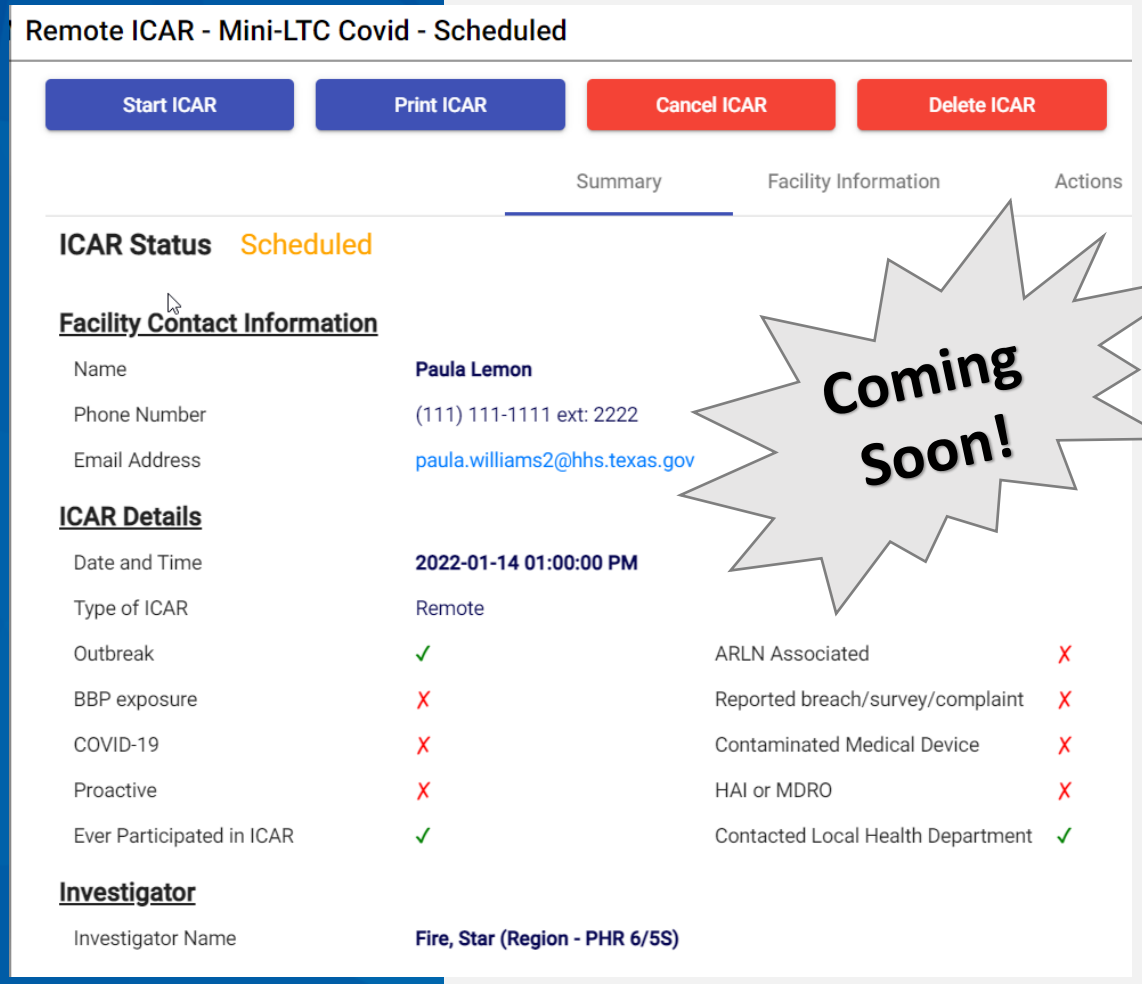
HAI Reporting

- Surgical site infections are reportable for critical access hospitals with:

  - ICUs, including NICU
  - Medical, surgical and medical/surgical wards

- SSIs should be reported for colon surgery and abdominal hysterectomies

Texas Healthcare Safety Network 2.0 (TxHSN 2.0)



- Data collection
- Management functionality
- Public health access
- Self-assessments
- Communicate, schedule, follow-up & reports all within the system

TxHSN 2.0

Benefits:

- Elimination of double data entry
- Single repository
- Easily accessible
- Automated summary reports
- Facilities can enter action plans directly in the system

Pilot Rollout:

- Houston Health Department
- Interested in participating, email: HAITexas@dshs.texas.gov

Texas Healthcare Safety Network 2.0 (TxHSN 2.0)

Infection Control Domains for Gap Assessment

Interpretation

81-100% = No or little improvement is needed. **(Green Circle)**

- Your facility demonstrated excellence in this domain. There were very few areas where your facility could improve.

61-80% = Needs some improvement. **(Yellow hollow circle)**

- Your facility is performing very well in this domain. However, there were some areas where your facility could improve.

41-60% = Needs significant improvement. **(Orange right-side up triangle)**

- Although your facility is demonstrating some activities in this domain, there is a need to work on other key aspects.

0-40% = Needs major improvement. **(Red octagon)**

- Your facility is lacking sufficient activities under this domain, and immediate interventions are required.

InfectionControlAssessmentDomain	Total Satisfactory Responses	Total Questions	Interpretation	Strengths	OverallAssessorComments	Action
Does the facility have an individual with training in infection control who provides on-site management of the IPC program?	2	8	**25.00 %** Needs major improvement.	Edit Strengths	Edit Overall Comments	Specific Notes And Recommendations

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What can YOU do to prevent HAIs?

Be an IPC advocate!

- Follow IPC best practices and encourage co-workers and patients to do the same
- Know where to find your workplace IPC policies
- Lead by example

Be a good patient!

- Speak up for your care
- Keep your hands clean
- Ask about safe injection practices
- Ask to have your room or equipment cleaned
- Ask questions about medications and vaccines
- Inform your provider if you recently received healthcare outside of the U.S.

Be a good visitor!

- Sanitize hands before and after visiting
- Stay home if you are sick
- Check first before you bring food, send flowers or bring the kids.
- Follow special precautions, if necessary.
- Don’t contribute to the clutter.

Infection Prevention is Teamwork

"The strength of the team is each individual member. The strength of each member is the team."

Phil Jackson

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Thank you!
Questions?

Remember to follow DSHS on Twitter and Instagram: **@TexasDSHS**

and on Facebook and YouTube at:

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