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Health and Human
Services

**Texas Department of State
Health Services**

Healthcare Safety Investigations Group COVID-19 Response

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Overview

Healthcare Safety Investigations Group's COVID-19 response

- Findings of major gaps in infection prevention and control practices at long-term care facilities identified through remote infection control assessments
- Support to facilities

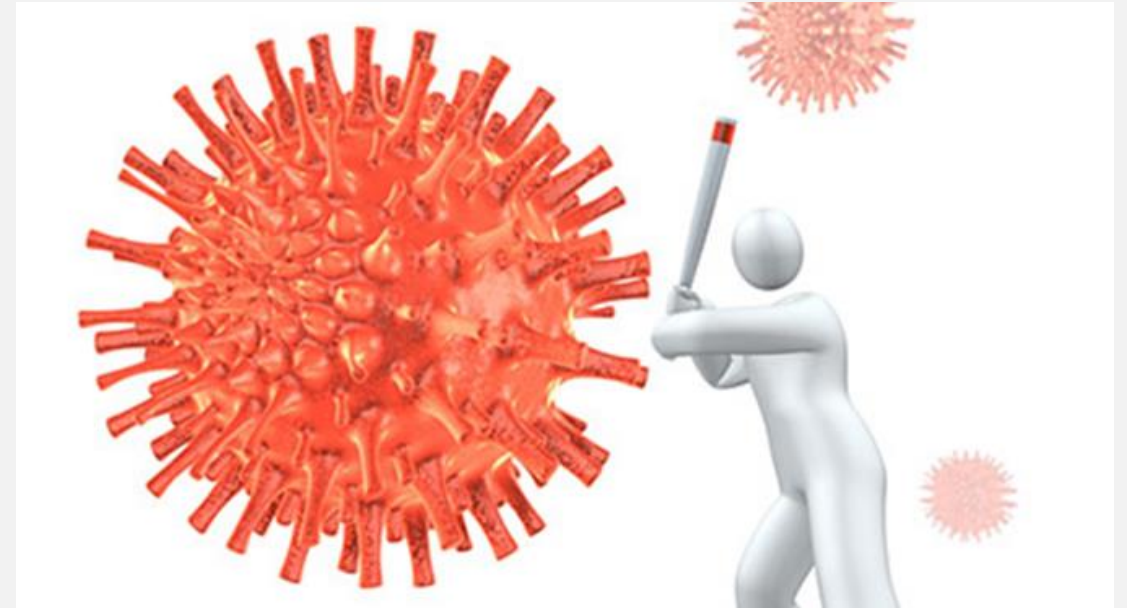
Panel

- Healthcare-Associated Infections (HAI) epidemiologists' highlights from the response and lessons learned



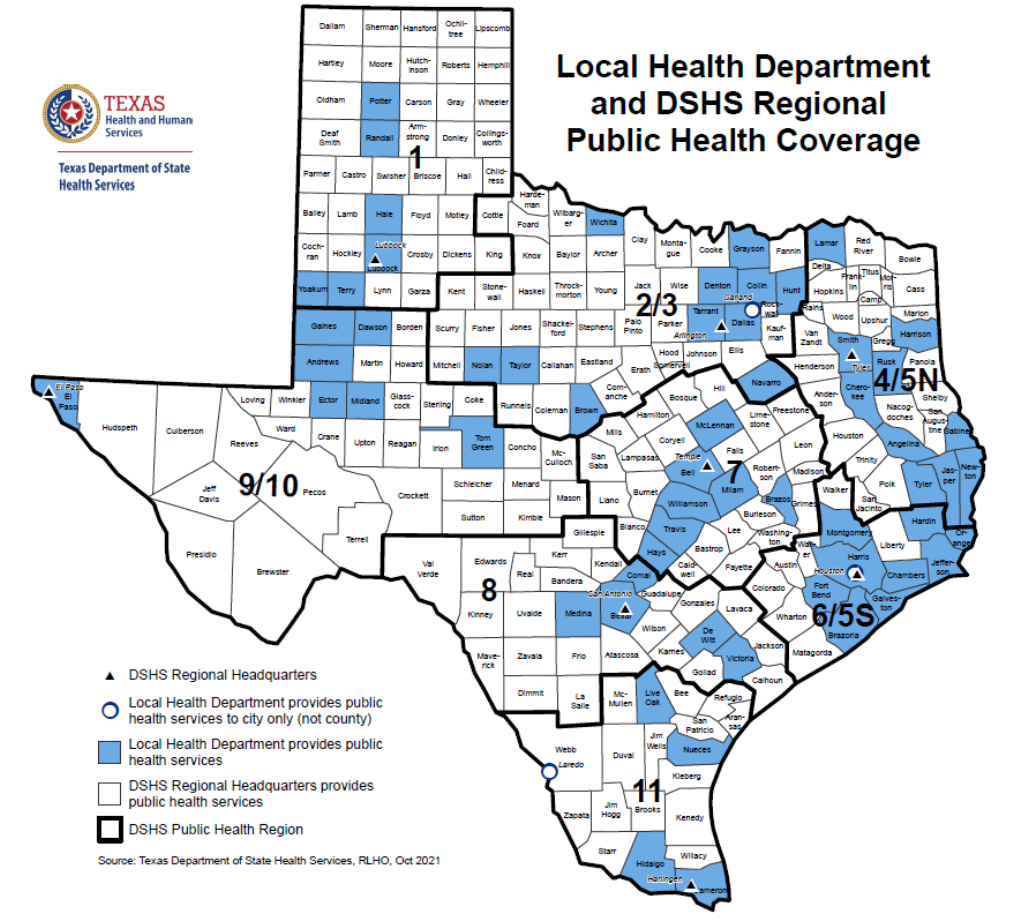
Learning Objective

- Understand the role of HAI epidemiologists and infection preventionists in the Texas COVID-19 response



Texas Public Health Regions (PHRs)

- 254 counties
- 53 local health departments* operate at the county or city level
- 8 PHRs
 - 1 HAI Epidemiologist per PHR
 - Lead and support HAI outbreak response activities
 - Direct assistance to healthcare facilities via infection control assessments



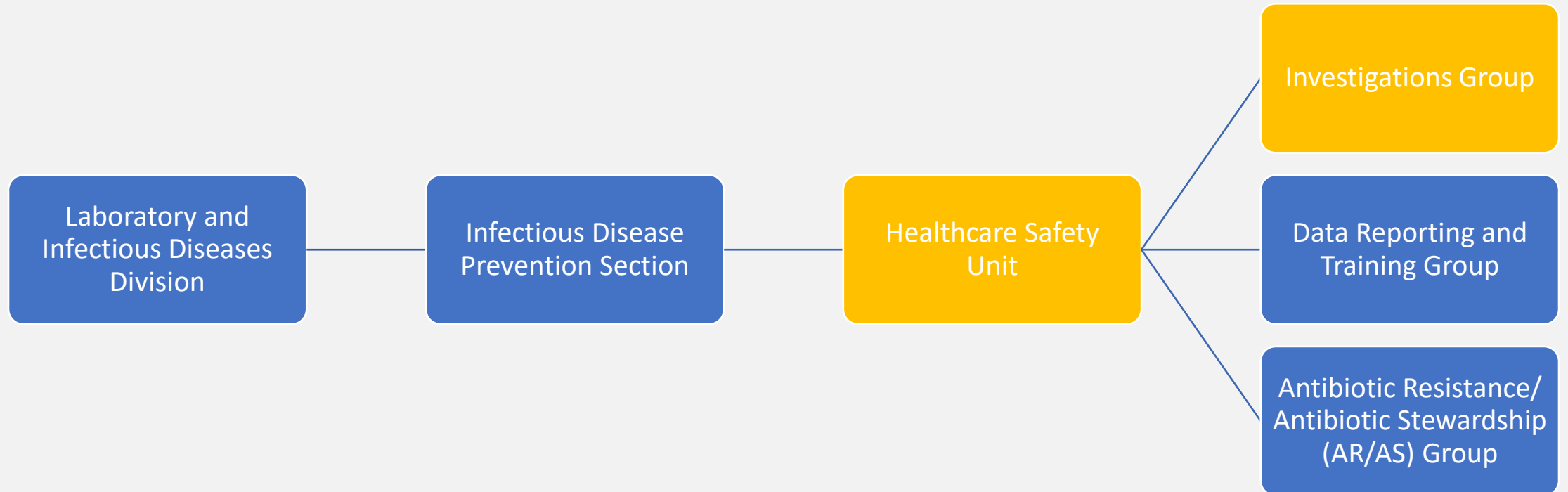
*That conduct epidemiological investigations

Texas Long-term Care Facilities (LTCFs)

Approximately 4,000 licensed facilities

- Nursing homes/skilled nursing facilities (NH/SNF)
 - Assisted living facilities (ALF)
 - Group homes
 - Independent living facilities
 - State-supported living centers
 - Psychiatric hospitals
 - Intermediate care facilities for individuals with an intellectual disability
- Approximately 1,200 Centers for Medicare & Medicaid Services (CMS)-certified nursing homes statewide
 - LTCF residents are more vulnerable to infectious disease than general population
 - older age and/or health status
 - living in congregate setting

DSHS Healthcare Safety (HCS) Unit



March 2020

- Urgent need to increase capacity of infection prevention and support to LTCFs
- Support from DSHS leadership and partners to modify staffing structures
 - Traditional structure of one HAI epidemiologist per PHR was insufficient to support COVID-19 surges
 - Increased Infection Preventionist staff to build capacity
 - Association for Professionals in Infection Control and Epidemiology (APIC) aided with recruitment



Remote infection control assessments

- Pandemic context compounds typical barriers and challenges to implementing optimal infection prevention and control (IPC) practices
- Public health had to adapt and employ tools outside of the scope of traditional public health investigations and response
- Rather than the traditional on-site infection control assessment and response (ICAR), many assessments were conducted remotely



Remote Infection Control Assessments in Long-term Care Facilities during COVID-19 Pandemic in Texas, 2020



Background

- Gaps in IPC in the LTCF context are well documented (*Leone et al. 2015; Gamage et al. 2011; Donlon et al. 2012*)
 - Lack of knowledge of proper sanitizing and disinfecting products
 - Insufficient hand hygiene policies
 - Lack of written procedures for cleaning and disinfection
 - Failure to designate staff or areas to care for residents with a known infection
 - Failure to restrict visitors during an outbreak
 - Lack of IPC leadership



Background

- HCS Unit conducts remote ICARs (tele-ICARs) in LTCFs to evaluate COVID-19 IPC knowledge and practices via a standardized assessment tool
 - Gauge different IPC measures specific to SARS-CoV-2
 - Either proactive (conducted prior to identified cases) or responsive to an outbreak (a new SARS-CoV-2 infection in any staff or any facility-onset infection in a resident)
 - State and local partners use findings to aid LTCFs by providing targeted and timely resources and support to mitigate identified gaps



Background (continued)

- IPC domains assessed in the context of COVID-19 in LTCF:
 - Visitor restrictions
 - Education, monitoring, and screening of healthcare personnel
 - Education, monitoring, screening, and cohorting of residents
 - Availability of personal protective equipment (PPE) and other supplies
 - Infection prevention and control practices
 - Communication
- Each of these areas are critical to the success of an LTCF IPC program, which is designed and implemented to protect vulnerable LTCF residents from infectious disease.

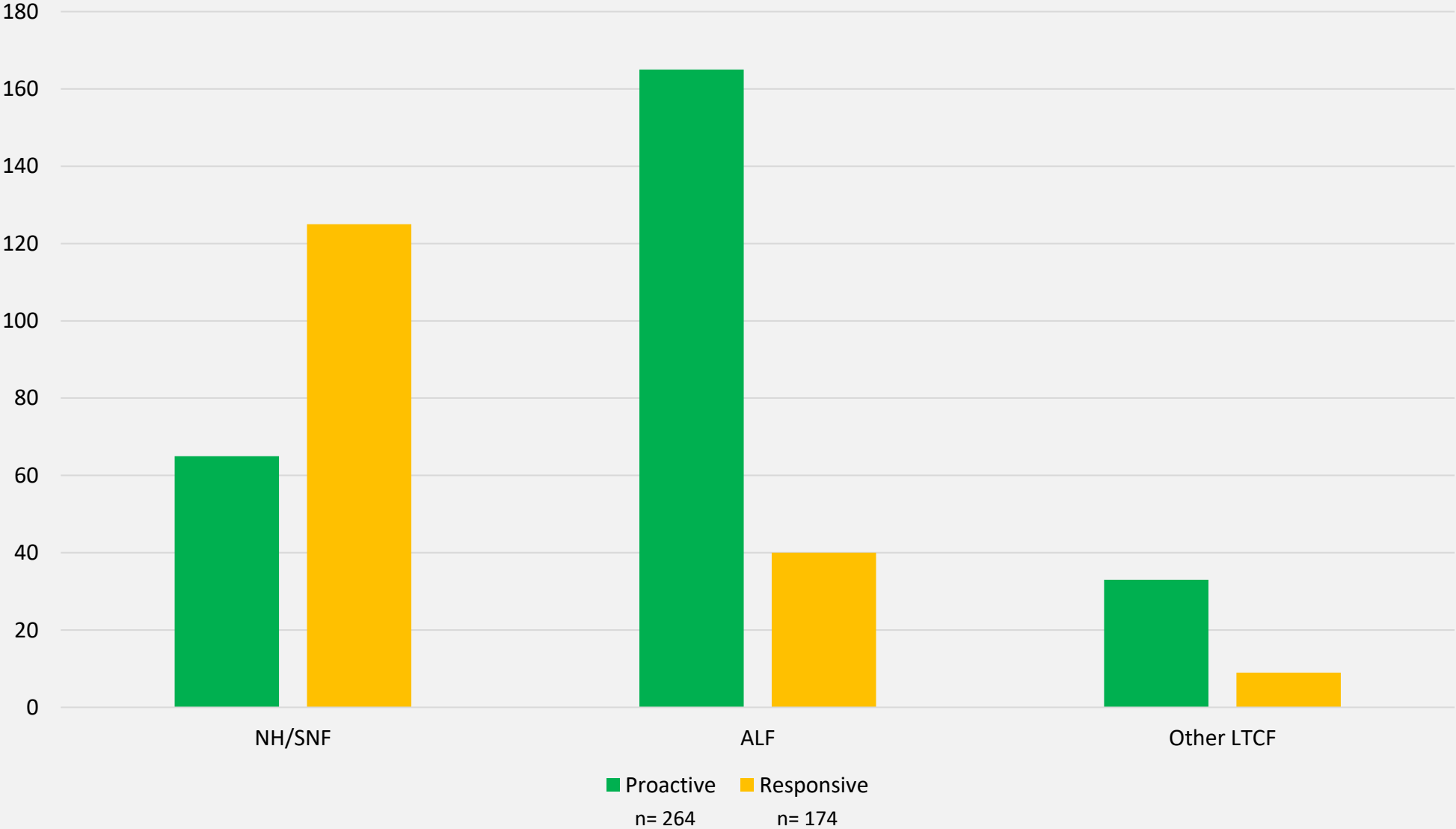


Methods

- Data from tele-ICARs conducted between March 1 and October 30, 2020 were analyzed to assess major gaps across LTCF types
 - Major gap: 10% or more of facilities not satisfying a specific IPC measure
 - Gaps assessed by tele-ICAR type: proactive or responsive
 - Statistical analyses: Fisher's exact tests and univariate logistic regression were used to characterize significant associations between major IPC gaps and LTCF or tele-ICAR type



438 tele-ICARs in Texas LTCFs



Major infection prevention and control gaps identified in LTCFs

IPC gap	Percent of LTCFs with IPC gap
No preference for alcohol-based hand sanitizer over soap and water	21.7
Lack of knowledge of disinfectant contact time	18.1
No cessation of resident communal dining	17.8
No auditing of hand hygiene and PPE compliance	16.8
No cessation of group activities and field trips	11.8
Lack of dedicated space for cohorting residents*	11.1

*Facilities that received proactive tele-ICARs only.

Results (continued)

- Significantly **more ALFs than NH/SNFs**:
 - Had not suspended resident communal dining ($p = <0.0001$)
 - Had not identified a dedicated space to cohort residents with confirmed SARS-CoV-2 infection ($p = 0.0003$).
- Significantly **more LTCFs that received a responsive ICAR** compared to a proactive ICAR:
 - Reported a staff preference for alcohol-based hand sanitizer over soap and water ($p = 0.0079$) ✓
 - Suspended communal dining ($p = 0.0006$) and group activities ($p = 0.0009$) ✓
 - Identified dedicated space to cohort residents ($p = 0.0087$) ✓



Conclusions

- Need for increased facility education and awareness of federal and state guidelines for group activities and communal dining
 - Physical distancing poses unique challenges for ALFs
 - Public health guidance initially varied by LTCF type
- Need to emphasize:
 - CDC recommendations for alcohol-based hand sanitizer vs. hand washing in healthcare setting
 - Importance of monitoring and auditing hand hygiene and PPE compliance
 - Disinfectant contact time

Conclusions (continued)



- Facilities may benefit from identifying space for dedicated COVID-19 units before an outbreak
- HCS Unit was able to reach approximately 4X as many LTCFs with remote ICARs compared to on-site in the same time frame
 - 108 on-site ICARs
 - 26 proactive
 - 82 responsive
- Remote ICARs enable public health agencies to:
 - Provide direct and individualized feedback to LTCF
 - Identify statewide opportunities for effective interventions in response to SARS-CoV-2

Response to date

- Between 03/01/2020 and 04/11/2022*, the HCS Unit conducted a total of 2,156 ICARs for COVID-19 in LTCFs
 - 1,689 remote ICARs
 - 467 on-site ICARs
- HCS Unit staff also carry out ongoing outreach and education through presentations, courses, and partnerships



Panel: HAI Epidemiologists



Questions

- What is one highlight you experienced working with a facility in your Public Health Region during the COVID-19 response?
- What is one critical lesson you learned about how to improve our response?

Panelists

Gillian Blackwell, MPH, BSN, RN, CIC
HAI Epidemiologist, Region I

Annie Nutt, MPH, CIC
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Thank you!

Questions?

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