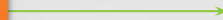


Barley Chironda RPN, MSc

SHEA Spring 2025 Highlights

Disclosure

I am an employee of
Clorox Healthcare.



The slides and
material provided do
not represent Clorox
Healthcare at all.

Agenda



**SHEA
SPRING**



APRIL 27-30, 2025

SHEASpring.org | [#SHEASpring2025](https://twitter.com/SHEASpring2025)

CHAMPIONSGATE, FLORIDA



Themes



Gloves



Sustainability



Emerging
pathogens



Resources



ASP



CLABSI



CAUTI



Disinfection

**PROJECT
FIRSTLINE**

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

CDC TRAIN



**NATIONAL™
WASTEWATER
SURVEILLANCE
SYSTEM**



NETEC

NATIONAL EMERGING SPECIAL PATHOGENS
TRAINING AND EDUCATION CENTER



**LEARNING
SHEA**

Online Education Center






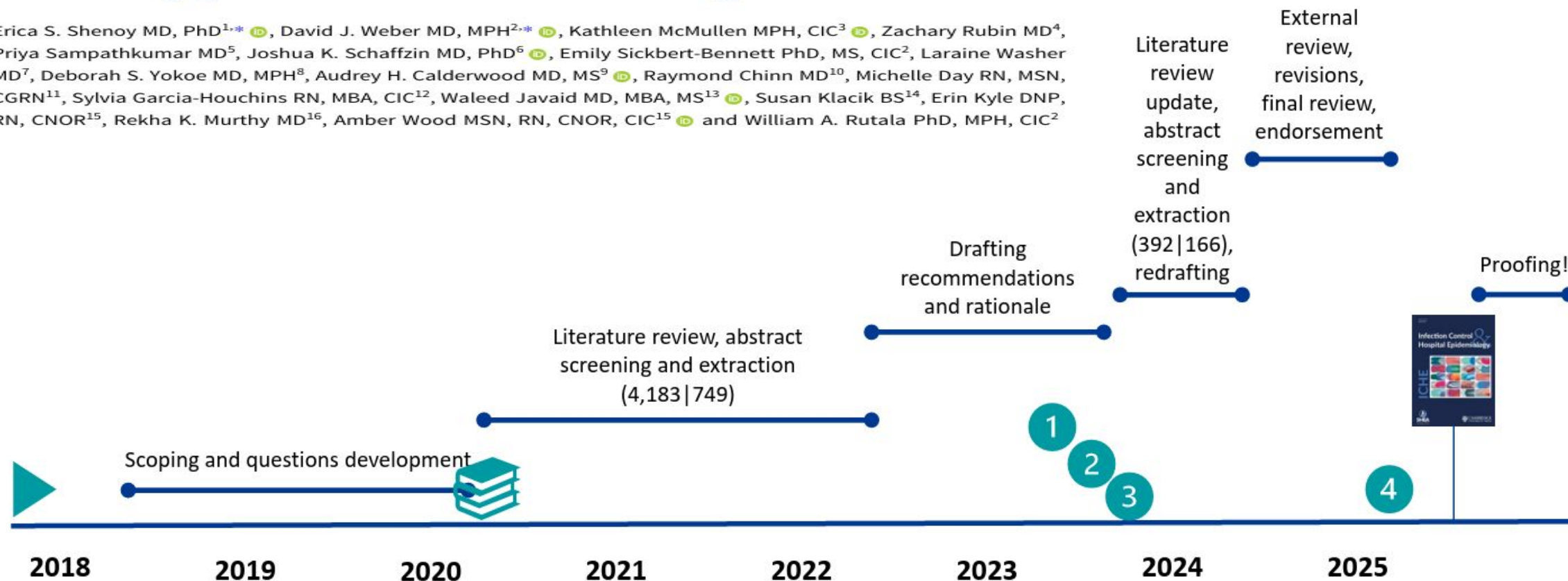
**PRACTICE
Greenhealth**

Resources

SHEA Expert Guidance

Multisociety guidance for sterilization and high-level disinfection

Erica S. Shenoy MD, PhD^{1,*} , David J. Weber MD, MPH^{2,*} , Kathleen McMullen MPH, CIC³ , Zachary Rubin MD⁴, Priya Sampathkumar MD⁵, Joshua K. Schaffzin MD, PhD⁶ , Emily Sickbert-Bennett PhD, MS, CIC², Laraine Washer MD⁷, Deborah S. Yokoe MD, MPH⁸, Audrey H. Calderwood MD, MS⁹ , Raymond Chinn MD¹⁰, Michelle Day RN, MSN, CGRN¹¹, Sylvia Garcia-Houchins RN, MBA, CIC¹², Waleed Javaid MD, MBA, MS¹³ , Susan Klacik BS¹⁴, Erin Kyle DNP, RN, CNOR¹⁵, Rekha K. Murthy MD¹⁶, Amber Wood MSN, RN, CNOR, CIC¹⁵  and William A. Rutala PhD, MPH, CIC²



Shenoy ES, Weber DJ, McMullen K, et al. Multisociety guidance for sterilization and high-level disinfection. *Infection Control & Hospital Epidemiology*. Published online 2025:1-23. doi:10.1017/ice.2025.41

Point of Use	<ul style="list-style-type: none"> • Apply treatment promptly to prevent soil drying use moisture retention products if delays occur.
Prep and Transport	<ul style="list-style-type: none"> • Clean devices thoroughly at the processing location, transport contaminated devices in closed, rigid containers.
Monitoring	<ul style="list-style-type: none"> • Use physical, chemical, and biological indicators to monitor sterilization effectiveness. Investigate and address sterilization failures promptly.
Lumens	<ul style="list-style-type: none"> • Ensure germicide flows through lumened devices. Dry devices thoroughly after HLD to prevent microbial growth.
Miscellaneous	<ul style="list-style-type: none"> • Use water-soluble lubricants and defoaming agents as per MIFU and Automated processing is preferred over manual HLD.
Tracking	<ul style="list-style-type: none"> • Use electronic tracking for device maintenance. Perform risk assessments to identify high-risk devices for patient-level tracking.
Implementation	<ul style="list-style-type: none"> • Educate, train, and assess competency of healthcare personnel involved in sterilization and HLD.
Postmortem	<ul style="list-style-type: none"> • Review common failures and implement best practices to reduce risks.
IFU	<ul style="list-style-type: none"> • Follow IFU for cleaning, sterilization, or disinfection and address conflicts between device and accessory MIFUs by contacting manufacturers.

Shenoy ES, Weber DJ, McMullen K, et al. Mult society guidance for sterilization and high-level disinfection. *Infection Control & Hospital Epidemiology*. Published online 2025:1-23. doi:10.1017/ice.2025.41

Pitching Antimicrobial Stewardship to the C-Suite

George E. Nelson, MD
Division of Infectious Diseases
Vanderbilt University Medical Center

Frame the Proposal

- Any similar, successful proposals to follow?
- What does the C-suite respond to?
 - Peer pressure
 - Patient safety event
 - Regulations
 - Something else?
- Respond both to request at hand as well as trajectory
 - Will have different needs at different program stages
 - Tools @ [PMID: 37735012](#)

Slide – Description	Business Focus
1 – Introduction	Company name, logo, tagline
2 – Problem	Define issue product/service solves
3 – Solution	How product solves problem, pain points, provides value
4 – Market Opportunity	Size, growth potential, market trends/demand
5 – Business Model	Revenue model, partnerships, distribution, pricing

Slide – Description	Business Focus
6 – Competitive Analysis	Main competitors, SWOT, your unique advantage
7 – Go-to-Market	Marketing, sales strategy
8 – Team	Key members, achievements, expertise
9 – Results/Traction	Revenue, expenses, profit, projections, and milestones
10 – Capital	How much? For what?
Extra – Info only	Formalized prospectus, company materials, etc.



- Comparative provider antibiotic prescribing feedback is an important stewardship tool, especially in the outpatient setting.
- Prospective audit and feedback and prior authorization both work.
- Computerized provider order entry prompts (+ education + feedback) reduced empiric extended-spectrum days of therapy in those with pneumonia and UTI compared to routine ASP (INSPIRE.)
- Antibiotic opt-out protocol that targeted patients with suspected sepsis resulted in more antibiotic discontinuations and no evidence of harm.

Scope 1: Direct Emissions

Scope 2: Indirect Emissions from Purchased Energy

Scope 3: Indirect Emissions from the Value Chain



W	Waste
E	Energy
A	Anesthetic gasses, Agriculture/Food
C	Chemicals, Pharmaceuticals, and Medical supplies
T	Transportation



Speaker



Mahmood Bhutta, FRCS DPhil
Presenter
Brighton & Sussex Medical School (UK)

Speaker



Shira Abeles, MD
Presenter
University of California, San Diego

Speaker



Preeti Jaggi, MD
Presenter
Emory University

1 cataract operation in US



- Infection rate 0.21% (Zafar et al Ophthalmology 2023)

93 cataract operations in India



- Infection rate 0.02-0.15%
Ravindran et al. J Cataract Refract Surg 2009
 Lalitha et al Ind J of Ophthalmology 2017
 Haripiya et al. J Cataract Refract Surg 2019

Images Care of Barbara Erny, MD, EyeSustain.org

UC San Diego Health



IV to po conversion

Speaker



Mahmood Bhutta, FRCS DPhil
 Presenter
 Brighton & Sussex Medical School (UK)

Speaker



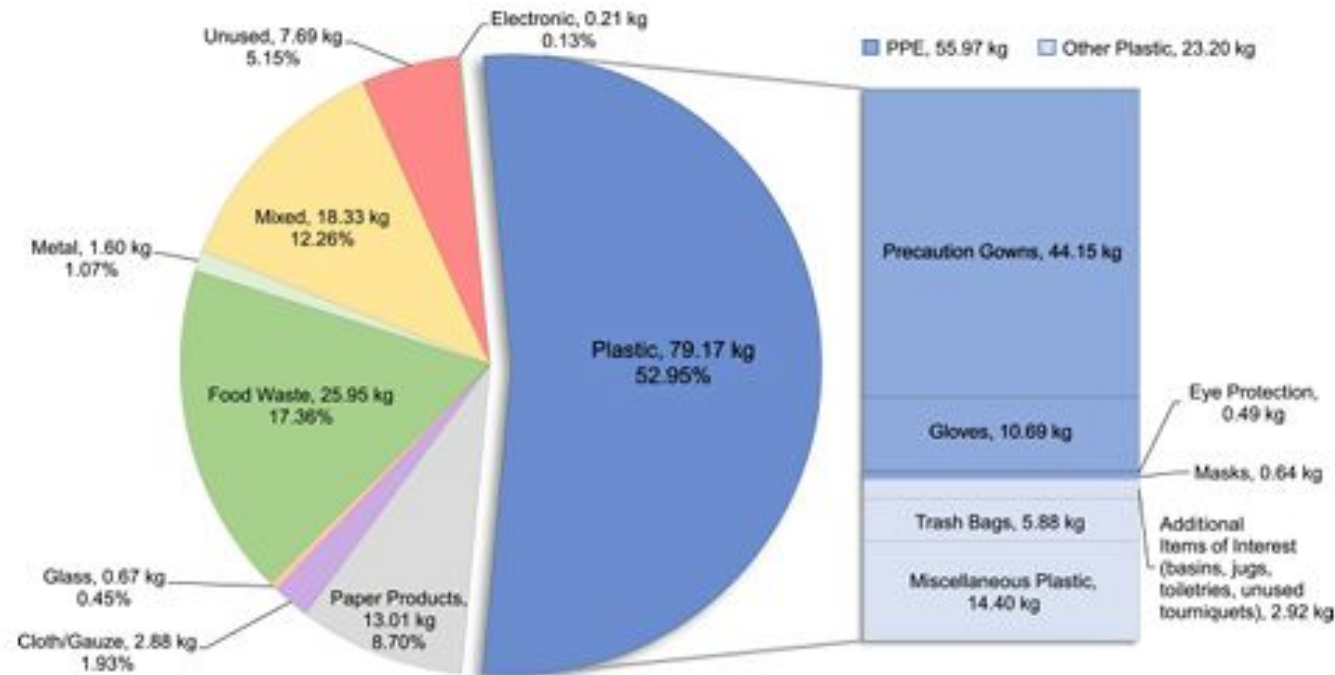
Shira Abeles, MD
 Presenter
 University of California, San Diego

Speaker



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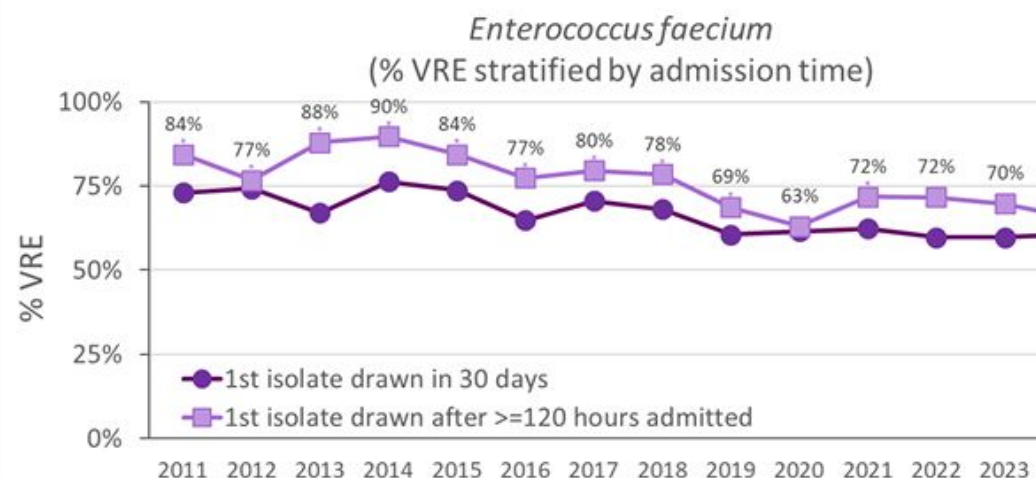
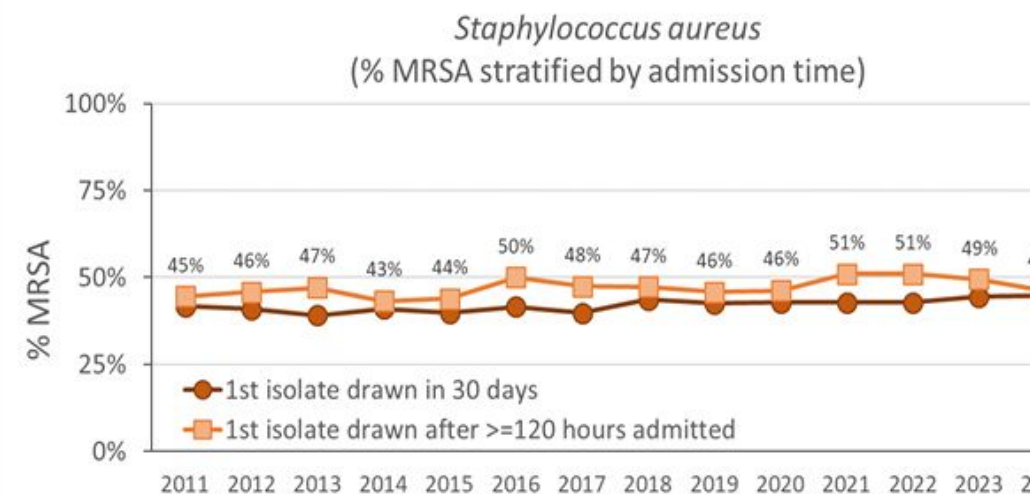
Case Study #1: Contact Precautions and Isolation Gowns

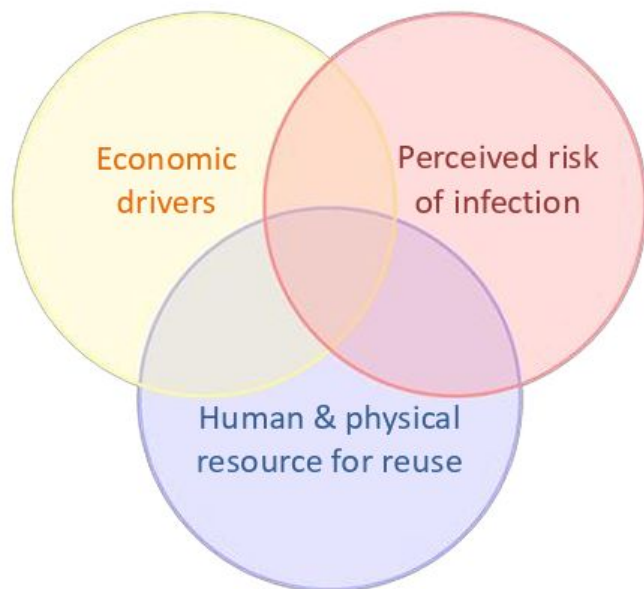


- **Gowns** ~44 kg/unit/day ~**17.6 tons** of plastic per unit per year
- **PPE** ~56kg/unit/day ~**22.5 tons** of plastic per unit per year

Contact Precautions – UCSD Health Experience
























- *2015 DC'd MRSA, VRE isolation*
 - No statistical change in % MRSA of all Staph aureus, or % VRE of all E faecium in antibiogram data, aligns with outcome studies looking at HAIs
- *2019 DC'd ESBL isolation*
 - Antibiogram data less well defined, in progress
- *Even with these interventions ~850,000 gowns per year*
 - **44 tons** of plastic waste in 2023
- *How can we do better?*
 - Why are we gowning for COVID-19?
 - Can we use launderable gowns?





2%

YELLOW WASHING

	Once daily ceftriaxone	Four doses ampicillin			
Pharmacy Prep time					
Nursing Time					
Plastic syringes to administer					
Plastic flush					
EVS workload					

Speaker



Mahmood Bhutta, FRCS DPhil
Presenter
Brighton & Sussex Medical School (UK)

Speaker



Shira Abeles, MD
Presenter
University of California, San Diego

Speaker



Preeti Jaggi, MD
Presenter
Emory University

Leaders

Medical and clinical directors of sustainability

How many MDS/CDS are there?

- 21 MDS in the U.S.
- 2 MDS in Canada

Who do MDS/CDS report to?

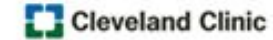
- President
- Vice President
- Chief Officer

What is the dedicated capacity for MDS/CDS?

- Range from 0.075 to 0.6 FTE
- Some serve as volunteers

What specialties do MDS/CDS bring?

- Wide-ranging



National Special Pathogen System: The Tiered System of Care



Level 1

Level 1 facilities, or Regional Emerging Special Pathogen Treatment Centers (RESPTCs), are regional resources hubs which provide highly specialized care. *Level 1s care for patients for their duration of illness.*

Level 2

Level 2 facilities, or Special Pathogen Treatment Centers (SPTCs), have the capacity to deliver specialized care to clusters of patients and serve as primary patient care delivery centers. *Level 2s can care for patients for their duration of illness.*

Level 3

Level 3 facilities, or Assessment Centers, are widely accessible care delivery facilities, able to conduct limited basic laboratory testing, stabilize patients, and coordinate rapid patient transfer. *Level 3s can care for patients for 12-36 hours.*

Level 4

Level 4 facilities, or All Other Healthcare Facilities, can identify, isolate, inform, & initiate stabilizing medical care; protect staff; and arrange timely patient transport to minimize impact to normal facility operations.

Additional partners, such as EMS and public health, are essential for the coordination of the System

Speaker



Angela Hewlett, MD;MS

Presenter

University of Nebraska Medical Center



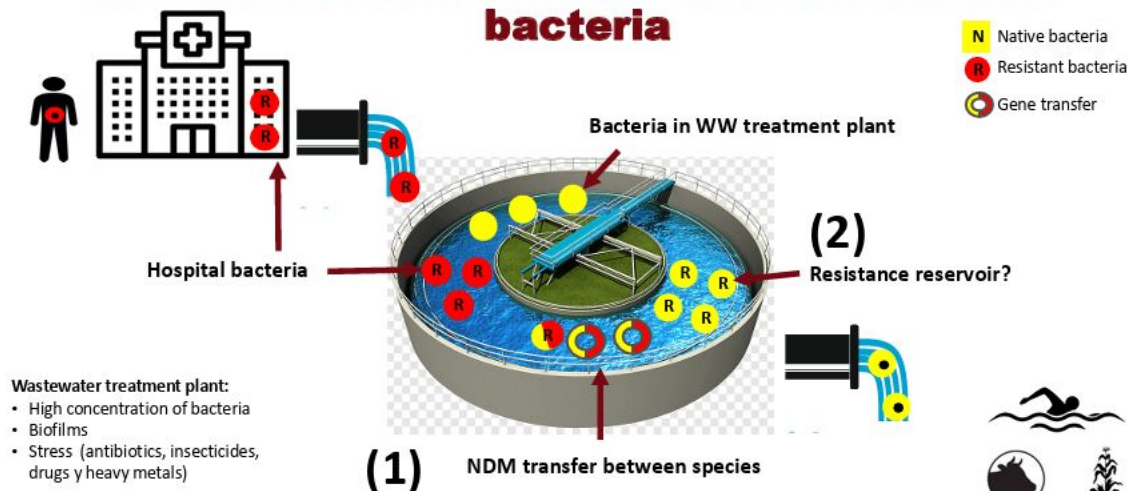
NETEC

NATIONAL EMERGING SPECIAL PATHOGENS
TRAINING AND EDUCATION CENTER

Level 1 Facilities: Regional Emerging Special Pathogen Treatment Centers (RESPTCs)



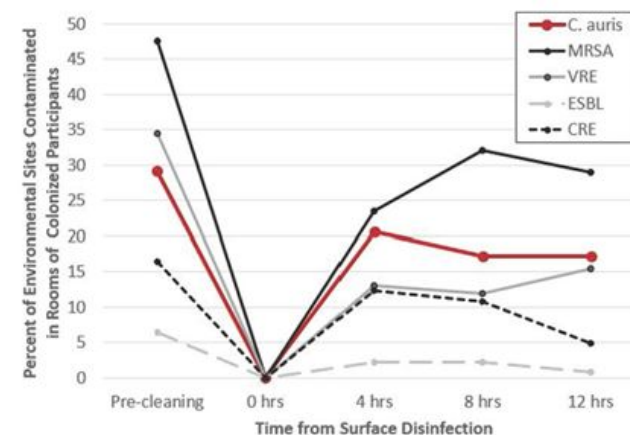
Mobile Genetic Elements (Plasmids) are transmitted from patients to environmental bacteria



Duran-Bedolla J et al. Appl Environ Microbiol. 2024 Aug 21;90(8):e0116524.



Contamination Within 4 Hours



Room Surfaces Cultured:

1. Bed Handrail
2. Remote/Call Button
3. Nightstand
4. Foot Board
5. Overbed Table

NYU Grossman School of Medicine

Sansom SE et al, Clin Infect Dis 2023

NYU Langone Health

15

Speaker



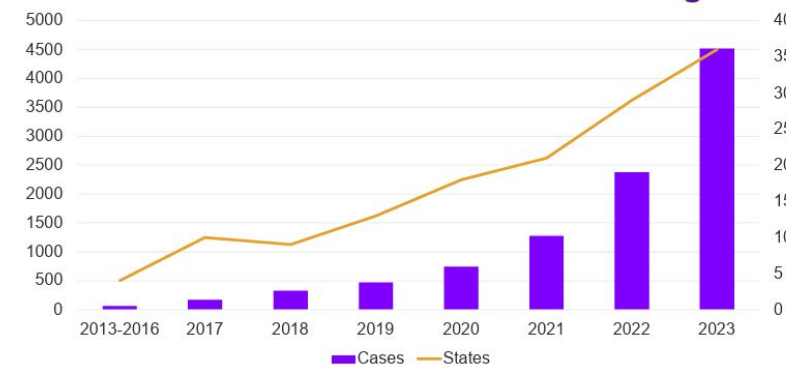
Jorge Salinas, MD
Presenter
Stanford University

Speaker



Dana Mazo, MD, MSc
Presenter
NYU Langone Health

US *C. auris* Clinical Cases Increasing



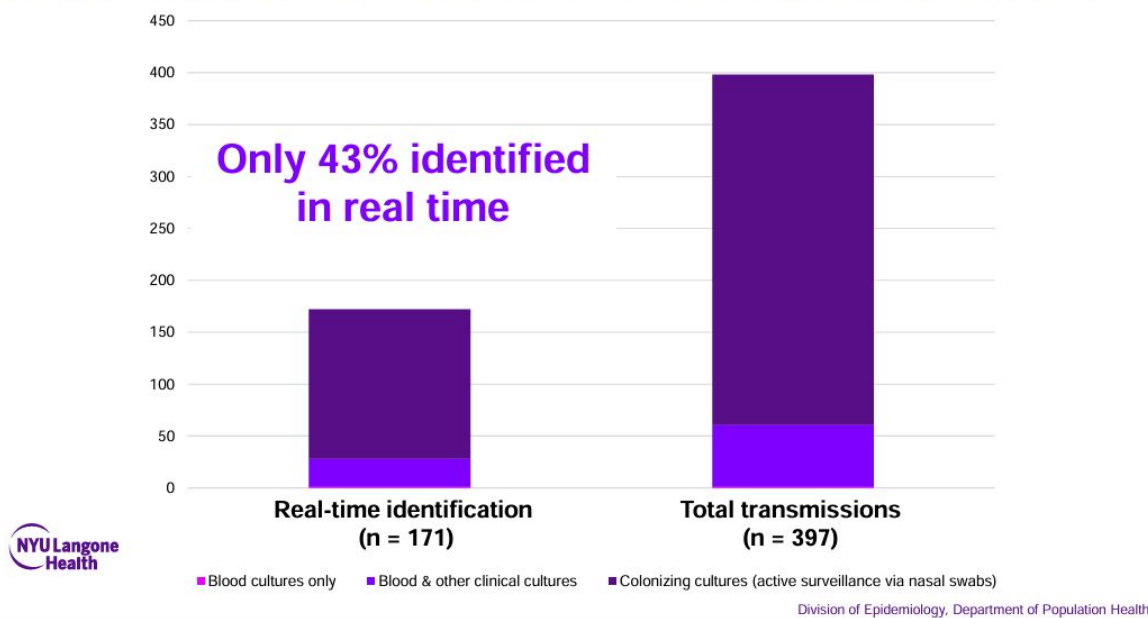
Lyman M et al Ann Intern Med 2023
<https://www.cdc.gov/candida-auris/tracking-c-auris/index.html?2023=2023;>

NYU Langone Health

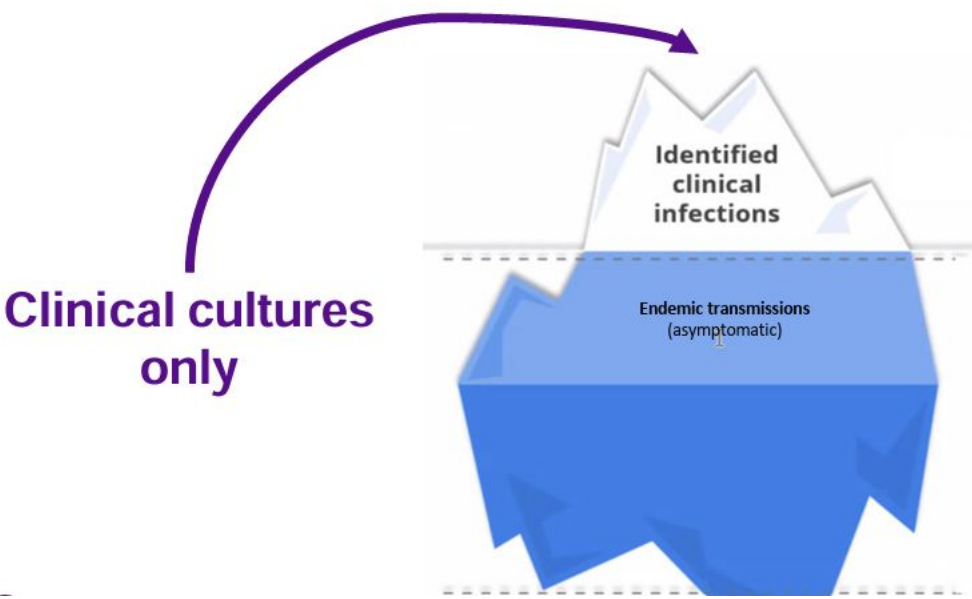
8

Real-time detection of Staphylococcus aureus transmission in hospitals

Colonization cultures enable real-time detection of transmissions



Genomic surveillance: beyond the tip of the iceberg



Speakers



Kristine Rabii, CIC, MSc.
Presenter
NYU Langone Health

Whole Genome Sequencing (WGS) is a powerful tool for infection prevention. By analyzing the complete DNA sequence of pathogens, WGS helps identify and track the spread of infectious agents within healthcare setting

Studies Focused on Improving Blood Culture Indications (US studies only)



Author(Year)	Setting	Intervention	Results
Pawlowicz (2016)	Adult ED, single center	Criteria for ordering: immunocompromised status, hemodynamic instability, one major (suspected IE, temp. $\geq 39.4^{\circ}$ C, or presence of indwelling vascular catheter) or two minor (temp. 38.3 to 39.3° C, age of >64 years, chills/rigors, vomiting, systolic BP <90 mm Hg, WBC $>18,000/\text{mm}^3$, bands of $>5\%$, platelets $<150,000/\mu\text{L}$, and/or cre >2.0 mg/dL) Shapiro criteria	33% reduction in BCU
Fabre (2020)	Adult medical ICU and medical wards, single center Exclusion: ANC <500 cells/ μL	Implementation of an evidence-based algorithm based on probability of bacteremia of common clinical scenarios	BCU reduction: 18% in MICU; 30% in M-wards, increase in BCx positivity
Woods-Hill (2022)	Pediatric ICU, multicenter	Implementation of BCx algorithm focused on BCx utilization in non-septic patients	33% reduction in BCU 36% reduction in CLABSI 13% reduction in broad-spectrum abx use
Robinson (2022)	Adult hem-on service with febrile neutropenia, single center Exclusion: HSCT	Pilot implementation of local febrile neutropenia guideline recommending no additional BCx after day 3 of persistent febrile neutropenia with exceptions (new hemodynamic instability, prior positive BCx, infectious diseases recommendation)	53% reduction in BCx use after day 3 of febrile neutropenia
Seidelman (2024)	Adult surgical ICUs (trauma and cardiothoracic), single center Exclusion: neutropenia or recipients of a heart or lung Tx	Implemented adapted version of BCx algorithm by Fabre et al*.	25%-45% reduction in BCU No difference in abx use, LOS or mortality
Theophanous (2024)	Adult ED, single center Exclusion: Heart and lung transplant	Implemented adapted version of BCx algorithm by Fabre et al*.	16% reduction in BCU, increase in positivity No difference in abx use, 30-day ED or hospital readmission
Wang (2024)	Adult medical and surgical ICU, single center	Implemented BCx algorithm by Fabre et al*.	20% reduction in BCU 4% decrease in antimicrobial days of therapy
Klontz (2024)	Hospital wide, single center	Implemented BCx algorithm by Fabre et al*.	40% reduction in BCU

BCU: blood culture utilization

*Fabre et al. Does This Patient Need Blood Cultures? A Scoping Review of Indications for Blood Cultures in Adult Nonneutropenic Inpatients. Clin Infect Dis.

Speaker



Valeria NA Fabre, MD

Presenter

Johns Hopkins University School of Medicine

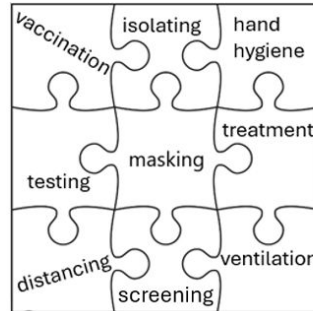
Khare et al. Active Monitoring and Feedback to Improve Blood Culture Fill Volumes and Positivity Across a Large Integrated Health System, Clin Infect Dis 2020, 70 (2)

Practical Guidance for Clinical Microbiology Laboratories: A Comprehensive Update on the Problem of Blood Culture Contamination and a Discussion of Methods for Addressing the Problem. Clin Microbiol Rev. 2019

Spreading knowledge. Preventing infection.®

In summary

- *Observational data* provides support for universal masking of healthcare workers + visitors (source control) as a strategy to decrease risk for transmission of RVI in the inpatient setting.
- Accounting for the epidemiology of respiratory viruses, year-round masking offers greater advantage than seasonal masking.
- Universal masking is imperfect:
 - Drawbacks acknowledged
 - Reliant on proper use and fit
 - But a piece of the puzzle



Speaker



Lynne Strasfeld, MD

Presenter

Oregon Health and Science University

Speaker



Mini Kamboj, MD

Presenter

Memorial Sloan Kettering Cancer Center

Disinfection of gloved hands for multiple activities with indicated glove use on the same patient

G. Kampf^{a,b,*}, S. Lemmen^c

^a Knieeler und Team GmbH, Infection Control Science, Hamburg, Germany

^b University Medicine Greifswald, Institute for Hygiene and Environmental Medicine, Greifswald, Germany

^c University Hospital Aachen, Department of Infection Control and Infectious Diseases, Aachen, Germany

Effect of Glove Decontamination on Bacterial Contamination of Healthcare Personnel Hands

Zogbeeh Kpodeh-Rogers,¹ Gwen L. Robinson,² Haleema Alsorehi,³ Daniel J. Morgan,² Anthony D. Harris,² Natalia Blanco Herrera,² Laura J. Rose,³ Judith Noble-Wang,³ J. Kristie Johnson,^{1,2} and Sarbhi Lookha², for the CDC Prevention Epicenters Program

¹Department of Pathology, and ²Department of Epidemiology and Public Health, University of Maryland School of Medicine, Baltimore, and ³Division of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia

We examined the effect of glove decontamination prior to removal on bacterial contamination of healthcare personnel hands in a laboratory simulation study. Glove decontamination reduced bacterial contamination of hands following removal. However, hand contamination still occurred with all decontamination methods, reinforcing the need for hand hygiene following glove removal.

Keywords. personal protective equipment; transmission; hand hygiene and gloves.

Short communication

The plastic pandemic: Quantification of waste on an inpatient medicine unit

Christian Mewaldt^a, Wynne Armand^{a,b}, Jonathan Slutzman^{b,c}, Jonathan Eisen^{a,b,*}

Recap

- Gloves are an essential protection measure for patients and HCWs and help reduce infections, but: we need to **stick to evidence**:
 - Wear gloves only as indicated (MDROs, gram-negative, *C. auris*, high-consequence pathogens)
 - Reconsider CPs for MRSA
 - Do not use them when there is no indication (SC or IM injections, feeding the patient, writing notes)
- The inappropriate use of gloves, beyond their low economic cost at an individual level, has consequences on patient care and the environment, a fact that we should not be oblivious to.

Speaker



Emily Sickbert-Bennett Vavalle, PHD;CIC
 Presenter
 UNC Health

Speaker



Elizabeth Monsees, PhD, RN, CIC, FSHEA, FAAN
 Presenter
 Children's Mercy Hospital

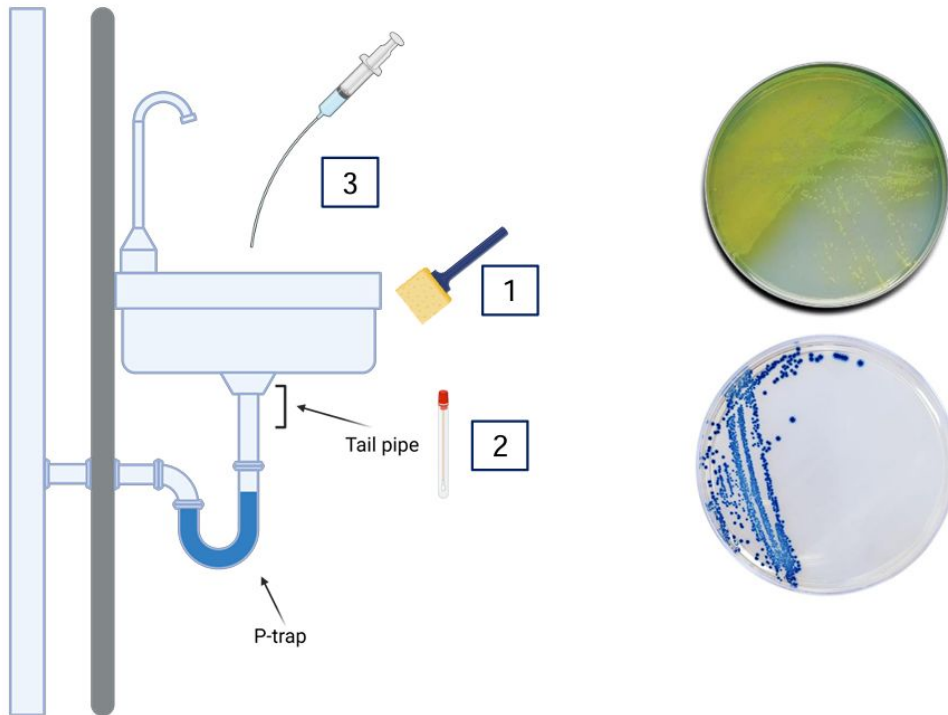


Diana Vilar-Compte, MD;MSc
 Presenter
 Instituto Nacional De Cancerologia

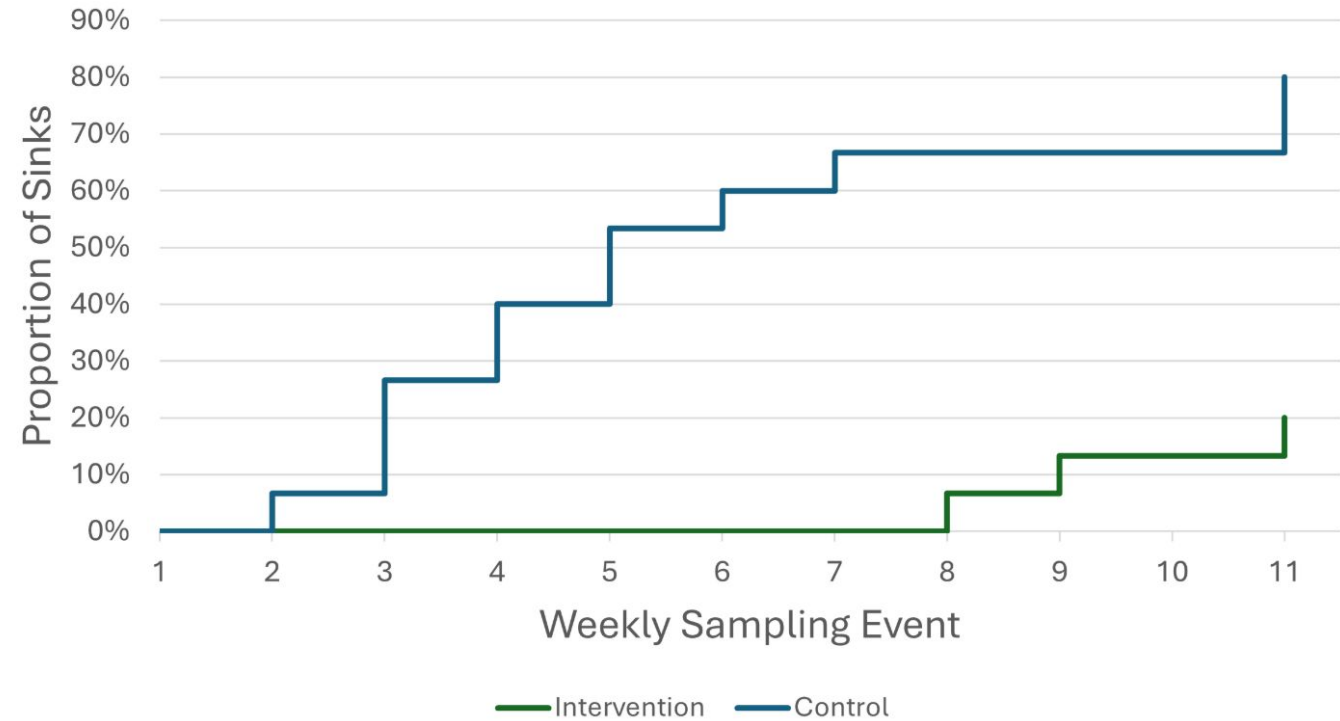
Gloves Reuse and Decontamination

Efficacy of a Foamed Disinfectant in Reducing Pathogen Contamination in Renovated Inpatient In-Room Sinks: A Randomized Controlled Trial

Bobby G. Warren, Amanda M. Graves, Guerbine Fils-Aime, Aaron Barrett, Isadora Mamikunian, Becky A. Smith, Deverick J. Anderson



Time to Sink Conversion Event (SCE) by an Epidemiologically Important Pathogen (EIP) by Study Arm



Bobby Warren, MPS

Presenter

Duke Center for Antimicrobial Stewardship and Infection Prevention



IDWeek 2025
October 19-22, 2025
Washington, DC

SHEA Spring 2027
March 30-April 2, 2027
Washington, DC

Spring 2026

2025

Spring 2027

SHEA Spring 2026
April 7-10, 2026
Chicago, IL

