

MRSA/VRE/CRE + Precautions

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IPC AND AS

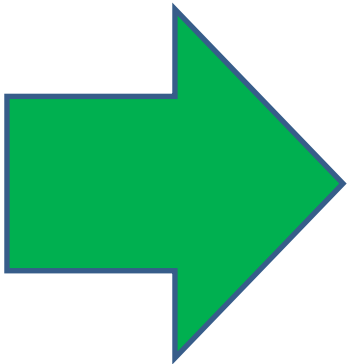
- Antimicrobial Stewardship: optimizes patient outcomes and slows the emergence of MDROs
- Infection Prevention & Control: inhibits transmission and acquisition of pathogens during medical care

HAND HYGIENE

- Soap and water
- Alcohol-based hand rub

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Prevents transfer of pathogens
to patients

PRECAUTIONS

Inhibits Transmission/Acquisition of:

- Drug-resistant pathogens
- Highly transmissible pathogens
- Highly virulent pathogens

PRECAUTIONS

RCW 70.41.430

Licensed hospitals must adopt a policy regarding methicillin-resistant staphylococcus aureus (MRSA)—Elements.

(1) Each hospital licensed under this chapter shall, by January 1, 2010, adopt a policy regarding methicillin-resistant staphylococcus aureus. The policy shall, at a minimum, contain the following elements:

- (a) A requirement to test any patient for methicillin-resistant staphylococcus aureus who is a member of a patient population identified as appropriate to test based on the hospital's risk assessment for methicillin-resistant staphylococcus aureus;
- (b) A requirement that a patient in the hospital's adult or pediatric, but not neonatal, intensive care unit be tested for methicillin-resistant staphylococcus aureus within twenty-four hours of admission unless the patient has been previously tested during that hospital stay or has a known history of methicillin-resistant staphylococcus aureus;
- (c) Appropriate procedures to help prevent patients who test positive for methicillin-resistant staphylococcus aureus from transmitting to other patients. For purposes of this subsection, "appropriate procedures" include, but are not limited to, isolation or cohorting of patients colonized or infected with methicillin-resistant staphylococcus aureus. In a hospital where patients, whose methicillin-resistant staphylococcus aureus status is either unknown or uncolonized, may be roomed with colonized or infected patients, patients must be notified they may be roomed with patients who have tested positive for methicillin-resistant staphylococcus aureus; and
- (d) A requirement that every patient who has a methicillin-resistant staphylococcus aureus infection receive oral and written instructions regarding aftercare and precautions to prevent the spread of the infection to others.

(2) A hospital that has identified a hospitalized patient who has a diagnosis of methicillin-resistant staphylococcus aureus shall report the infection to the department using the department's comprehensive hospital abstract reporting system. When making its report, the hospital shall use codes used by the United States centers for medicare and medicaid services, when available.

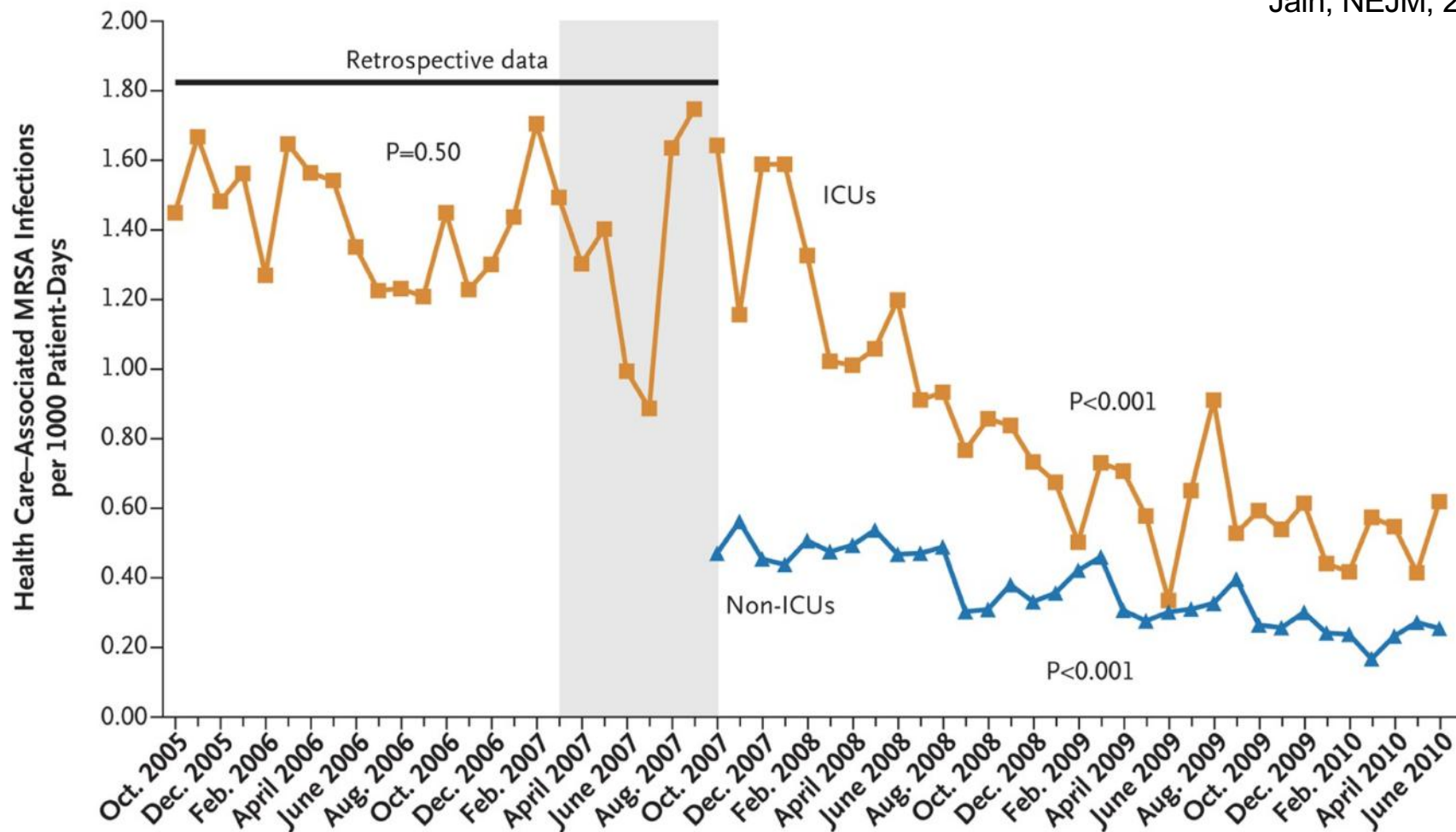


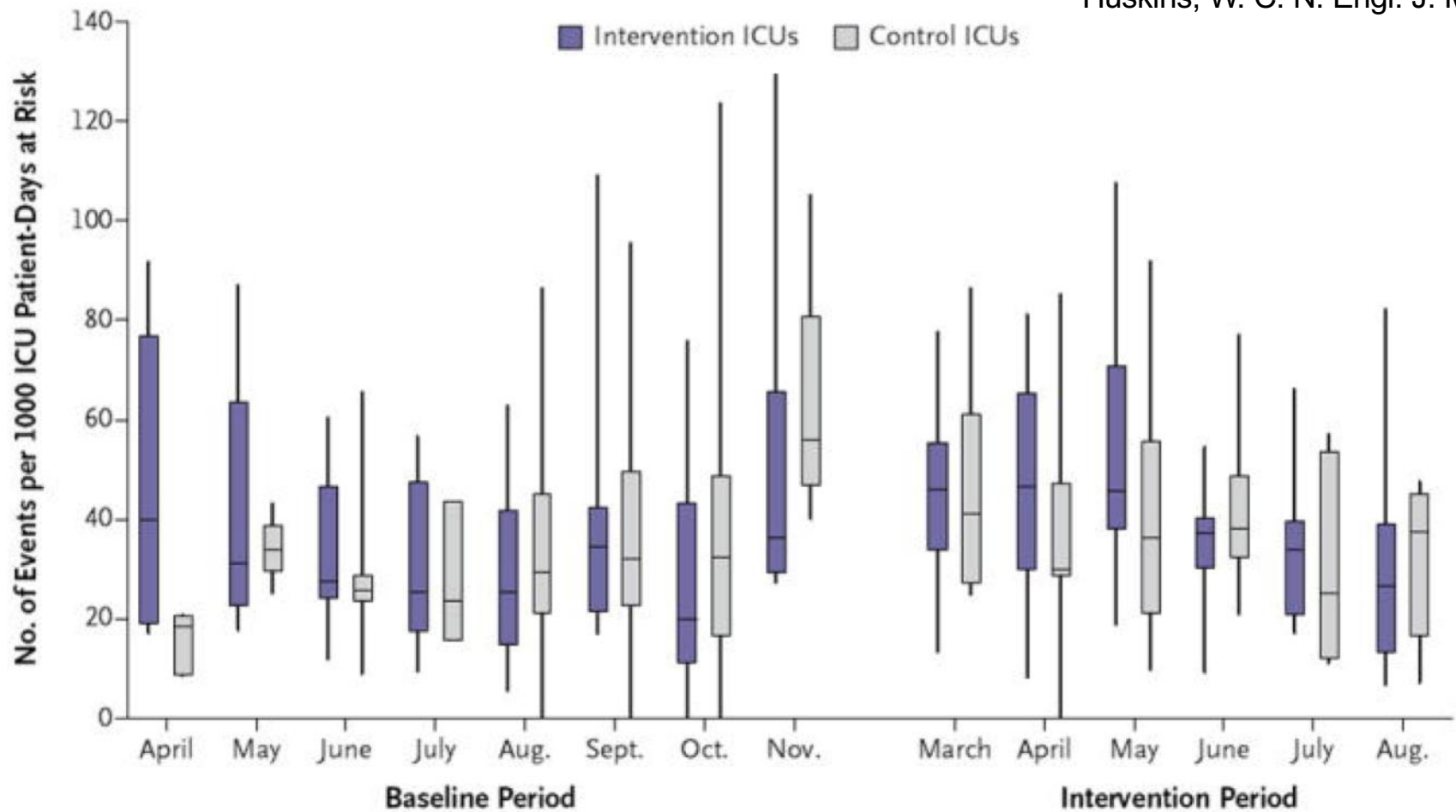
Horizontal interventions:
HH, SSI bundles, CL
bundles

Vertical
interventions:
MRSA, VRE,
ESBL, CDI, TB



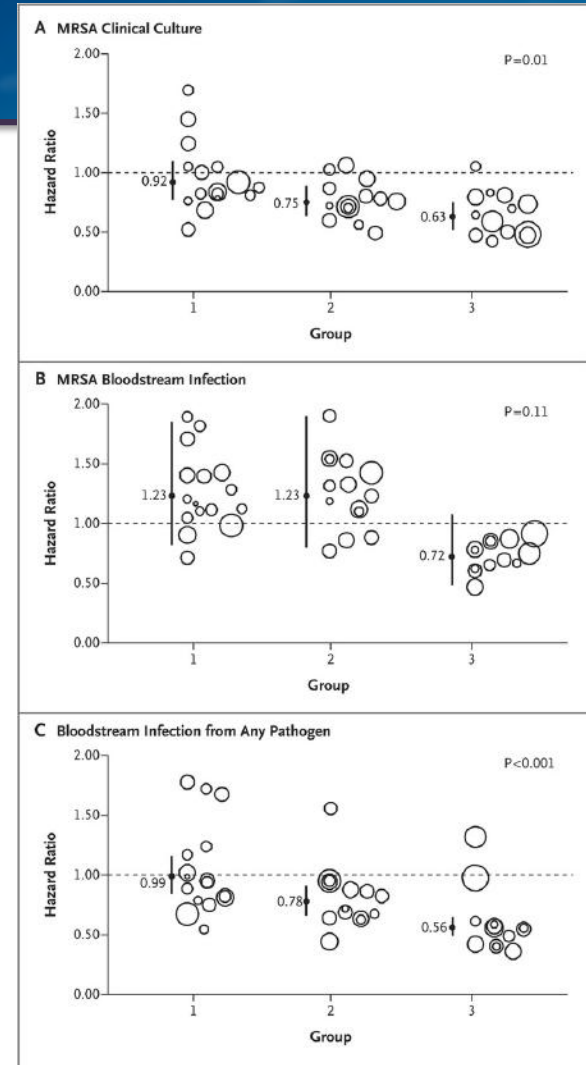






Effect of Trial Interventions on Outcomes

- Group 1: MRSA screening and isolation
- Group 2: MRSA screening, isolation and decolonization
- Group 3: Universal decolonization, no screening or isolation



Precautions

Cons:

- Cost to the patient (2x AE rate)
- Costs to the staff
- Costs to the hospital
- Complex (who and for how long?)

Precautions

- Standard
- Contact
- Contact enteric
- Droplet
- Airborne
- Airborne contact
- Droplet contact
- “High path” precautions

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Transmission-based
precautions

STANDARD



**Clean hands when entering and leaving room.
Cover mouth and nose with arm or tissue when coughing or sneezing.**

Doctors and Staff Must:



Gown and glove if soiling likely



Wear mask and eye cover if splashing body fluids likely

CONTACT

Doctors and Staff Must:



**Gown and glove at
door**



**Use patient dedicated or
disposable equipment.
Clean and disinfect shared
equipment.**

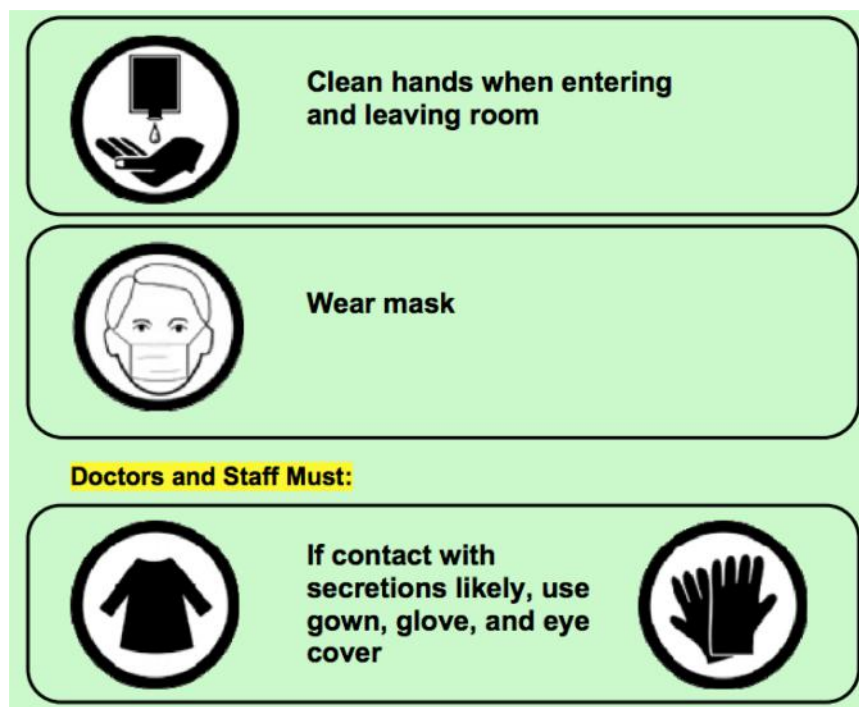
MRSA, VRE, CRE, uncontrolled wounds

CONTACT ENTERIC



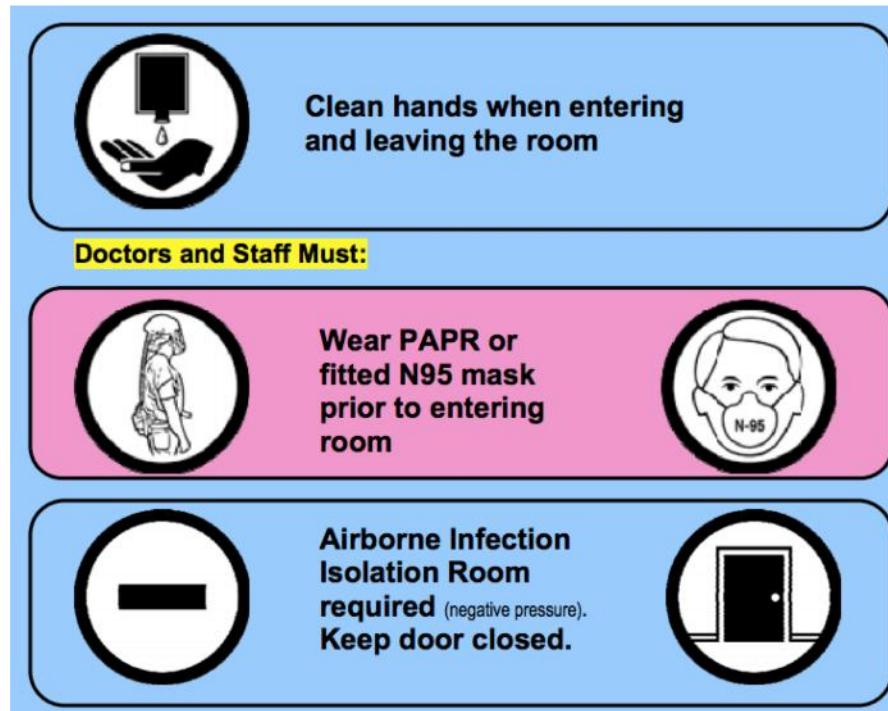
C. difficile, rotavirus, norovirus

DROPLET



Influenza, meningitis, RSV, pertussis

AIRBORNE



Pulmonary and laryngeal TB

AIRBORNE CONTACT



Varicella and disseminated zoster

DROPLET CONTACT



Clean hands when entering
and leaving room



Wear mask

Doctors and Staff Must:



If contact with
secretions likely, use
gown, glove, and eye
cover



Doctors and Staff Must:



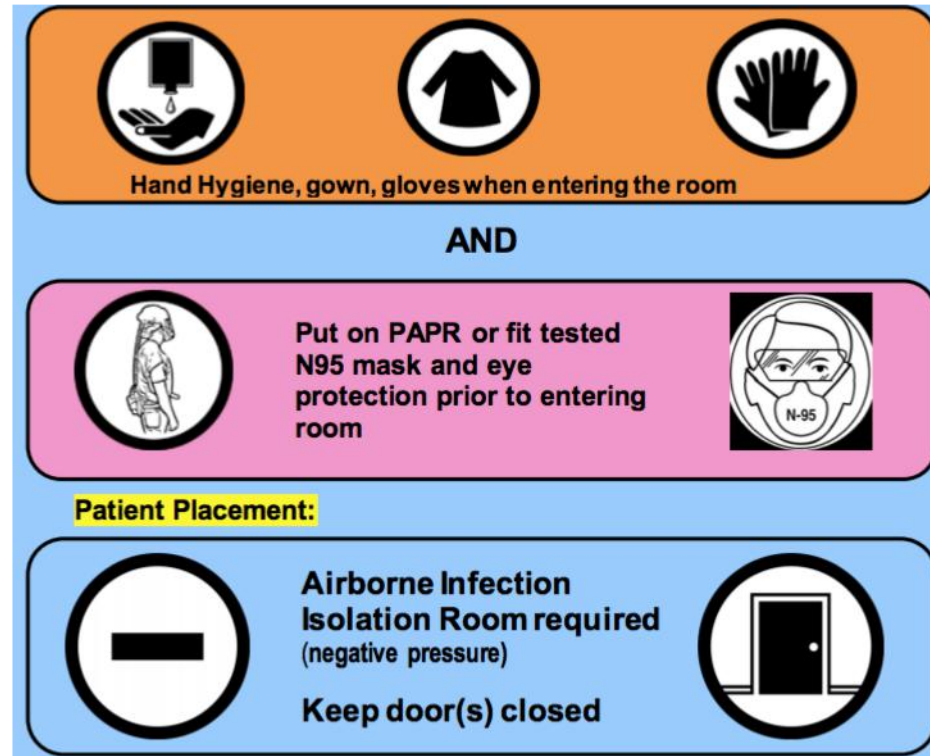
Gown and glove at
door



Use patient dedicated or
disposable equipment.
Clean and disinfect shared
equipment.

Respiratory viruses


AIRBORNE RESPIRATOR CONTACT




SARS, MERS, novel respiratory viruses

HIGHLY PATOGENIC INFECTIONS


***Trained Observer Must Be Present for Donning & Doffing of PPE**




- Clean hands when entering and leaving room with soap and water. Remove Personal Clothing and Items. Perform frequent disinfection of gloved hands using an ABHR.




- Single-use (disposable) fluid-resistant or impermeable Full Gown at doorway or anteroom following appropriate donning and removal guidelines. **No skin should be showing.**
- Single-use (disposable), fluid-resistant or impermeable boot covers that extend to at least mid-calf.



- PAPR OR N95 respirator with hood head cover and full face shield.

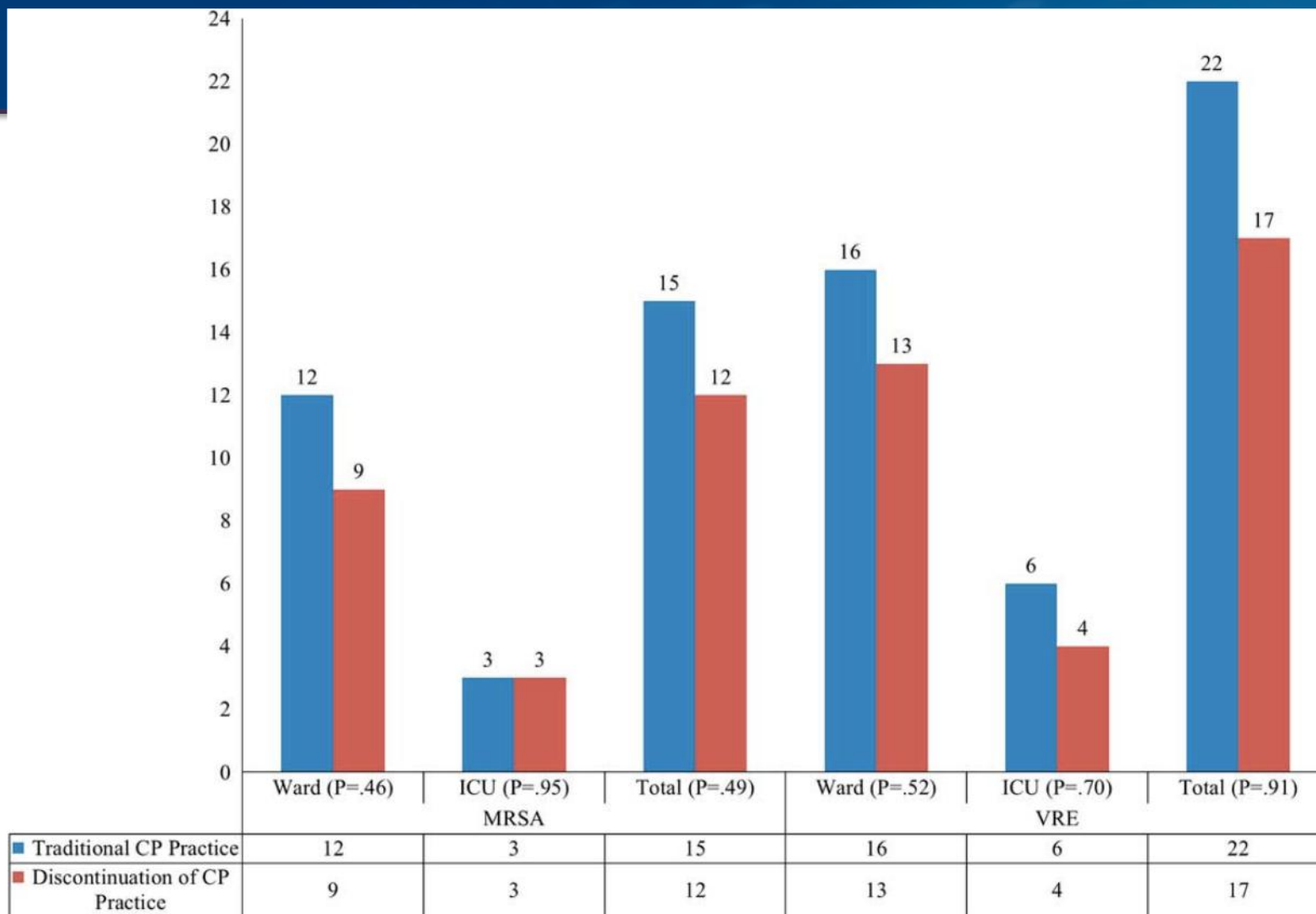


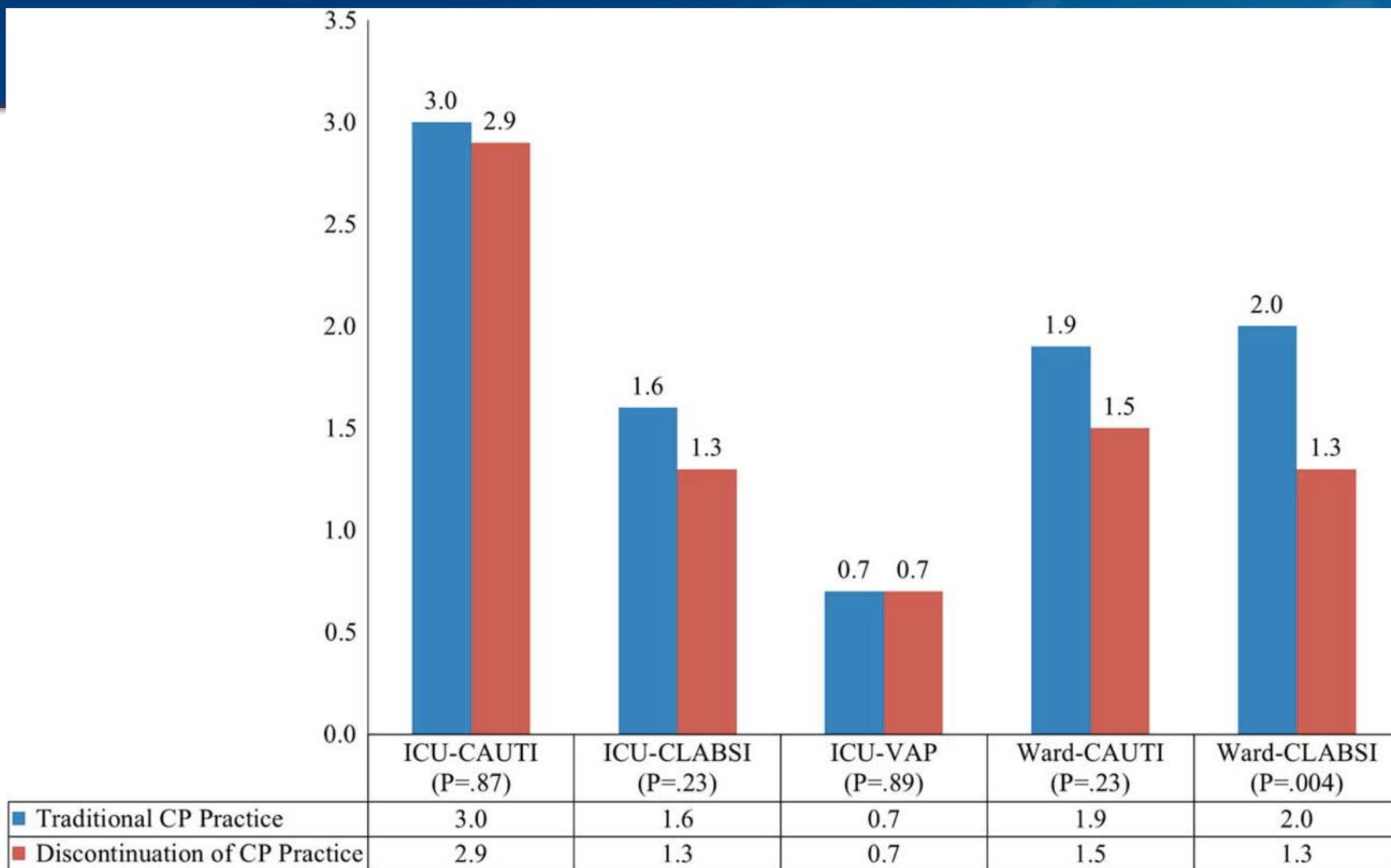
Single-use (disposable) nitrile examination gloves with extended cuffs. Two pairs of gloves should be worn. Outer gloves should have extended cuffs.



- Use patient dedicated or disposable equipment.
- Clean and disinfect shared equipment with prescribed disinfectant.

Ebola, viral hemorrhagic fevers





Hierarchy of Health and Safety Controls

- Training and admin controls
- Engineering controls
- Work practice controls
- Personal protective equipment

References

- Hand hygiene:
http://www.who.int/gpsc/5may/MDRO_literature-review.pdf
- Transmission-based precautions:
http://www.wsha.org/wp-content/uploads/Standardization_Appendix_A.pdf
- PPE: <https://www.cdc.gov/hai/prevent/ppe.html>